

1970 REPORT BY THE CHIEF ENGINEER TO THE
PASSAIC VALLEY SEWERAGE COMMISSIONERS

JANUARY 11, 1971

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This report consists of three distinct parts:

Part I describes pollutions which were still active violations as of the end of 1970, together with any actions taken by the Commissioners and the parties responsible for the violation.

Part II consists of a description of polluting violations, which were eliminated during the year 1970, together with a report on the actions taken by the Commissioners and the parties responsible for the violation.

The pollutions described in Parts I and II are limited to those which occurred in the Commissioners' district, i. e., the Passaic River and its tributaries from the Great Falls in Paterson to the mouth of the river at Newark Bay, and in no way attempts to describe the pollution which occurs in the Passaic River above the Great Falls, which is outside of the Commissioners' district.

Part III consists of Special Reports of 1970 which are of interest to the Commissioners.

PART I

Jan. 1 Violations - City of Newark
to
Dec. 31

On February 6, 1970, Judgement was entered against the City of Newark to abate all pollution made from the City's Lockwood Street Storm Sewer and Blanchard Street Storm Sewer by May 6, 1970, (three months from the date of the Order), and the City of Newark was ordered to remove all pollution from the Meadowbrook Storm Sewer by August 6, 1970, (six months from date of Order). The City awarded contracts to construct sewers in Lister and Blanchard Streets in order to abate pollution from Blanchard Street, Lockwood Street and Brown Street Storm Sewers. Problems occurred during construction due to change of engineers and administration.

The firm of Barnett and Herenchak was hired by the City to take over the engineering and supervision of construction, formerly done by Constrad. Work on this construction started on September 10th and continued through December.

The City appeared in court on September 18th and made application for an extension of time on their pollutions and on a matter with the South Side Interceptor Sewer overflows. These were carried by the court.

Mr. Segreto (Commissioners' Chief Counsel) was called by the City's Assistant Corporation Counsel and was requested to hold off further legal action until January when the new administration has had a chance to review these matters.

The City of Newark did not submit a progress report to Passaic Valley during the month of December and the following pollutions still exist.

Brown Street Sewer - The Sherwin-Williams Company has completed the sealing of a broken section of the sewer used by them thus removing from the storm sewer their pollution. The pollution from this sewer is now greatly reduced but analyses indicated there is still pollution emanating from other sources.

Harrison Ditch Storm Sewer - Oily liquid continues to discharge from this sewer to the Passaic River.

Lockwood Street Storm Sewer - Industrial wastes continues to discharge from this sewer to the Passaic River.

Meadowbrook Storm Sewer - Sanitary waste still enters this sewer and enters Second River. Mr. Byrne, Assistant Superintendent of Sewers of Newark, continues to tell the Commissioners' River Inspector, J. Brady, that he would investigate but he was short of help.

Roanoke Avenue Storm Sewer - Industrial wastes continue to discharge into the Passaic River despite the concrete dam built by the City to keep the sanitary sewer from overflowing into the Storm Sewer. On December 30 and 31, the City attempted to walk and photograph a part of this sewer to determine the source of pollution with negative results. The City personnel promised to investigate further in January.

Inter-
mittent Violations - City of Clifton

There are several storm sewers that discharge some polluting material into the Passaic River or tributaries. The City is working toward elimination of these. A conference was held at the Passaic Valley Sewerage Commissioners' Office on December 22nd, wherein these problems were discussed with Mr. Rudolph Lorenz, Acting Engineer for Clifton. The following is a summary of the problems as of the end of December:

City of Clifton continued

Athenia Storm Sewer.

The discharge from this sewer which enters into Weasel Brook, near Fornelius Avenue and Lewis Place, was analyzed and found polluting. Upon being notified, the City started cleaning various sanitary lines which could cause an overflow into the storm sewer. Despite the cleaning, sanitary waste still entered Weasel Brook. The Commissioners are aiding the City in sampling various areas to find the source of pollution.

Entin Storm Sewer.

This sewer serves to drain the low lying Entin Industrial tract in Clifton to the Passaic River. Intermittent pollutions from this sewer indicate either an illegal connection from one or more of the industries, or careless housekeeping wherein industrial wastes are allowed to reach the storm sewer catch basins. The City has assigned personnel to check each of the industries.

Kuller Road Sewer.

The City of Clifton has a low sewer in Kuller Road which is normally pumped into the line at Hazel Road. The sewer is intermittently overloaded, and rather frequently there are pump failures, which then allows the sewerage to overflow at the manhole in Kuller Road. The sewage flows to a ditch which leads to and pollutes Weasel Brook.

As of the end of December, the pumping station had been rebuilt larger, but the electrical work is not completed. It is expected that this work will be completed in January.

Jan. 1 Violation-Crucible Steel Company, Spalding Works,
to 1000 South 4th Street, Harrison, New Jersey.
Dec. 31

A yellowish oily material flowed into the Passaic River from a large culvert owned by this company. This company claimed that a number of other companies leased land on an industrial tract owned by Crucible Steel Company, and the polluting material was not emanating from Crucible Steel itself, but from one of the other tenants, and therefore the Crucible Steel Company would not be liable.

The Commissioners maintained that since the culvert from which this material discharges into the Passaic River was owned by Crucible Steel Company, that Crucible Steel Company was liable for any polluting material emanating from the culvert. Since there seemed to be a difference of opinion concerning liability, the Commissioners instituted a suit against Crucible Steel Company. An Order to Show Cause was

Crucible Steel continued

originally returnable on May 15, 1970, but was postponed to July 17, 1970, and continued to September 18th.

On September 18th, Crucible said they had eliminated all of the pollution emanating within their own property and had traced oil to other users of the sewer. They requested additional time to check suspected oil sources on the Charles F. Guyon and the Harris and Sons Steel companies, and perhaps other parties.

Judge Lynch signed a Civil Action Order bringing in Charles F. Guyon, Inc. Miele Brothers Trucking Company, Aszo Steel Company, Gabest, Inc., Prince Packaging Products, Inc., Joseph Supor Trucking Company, Harris and Sons Steel Company, Harrison Warehouse Company, Rose Ribbon and Carbon Mfg. Co., Inc., Admiral Steel Equipment Co., Inc., Super Steel Industries, Inc., (corporations), and Miles A. Galin. Further proceedings in the case were scheduled for 10/23/70.

On October 23rd, progress reports were submitted and the Commissioners stated that the volume of the pollution had decreased. Crucible was ordered to submit a detailed plan for locating and halting the remaining pollution to Mr. Lubetkin and they were to return to court and report on November 20th. Since work was progressing, the November 20th hearing was postponed to December 4th, then January 8, 1971.

Mr. Art Whinn of Crucible had temporarily sealed off a sewer line allegedly coming from Guyon and had halted other sources of pollution, however on December 9th, a sample taken indicated the presence of acid again. As of the end of December, slight oil films were still visible.

Inter- Violation-Curtiss-Wright Corporation, 1 Passaic Street,
mit- Wood-ridge, New Jersey 07075.
tent

The discharge from this company to Feld's Brook intermittently contains oil. The company is installing a complete Dorr- Oliver treatment plant for the removal of this oil.

On October 27th, the company wrote to the Commissioners and informed them that it is expected that the treatment plant will go into operation around the last week in December.

As of the end of December the work was not completed and it is now expected to be completed sometime in January.

Jan. 1 Violation- Mr. and Mrs. Edelbock, 563 Passaic Avenue,
to Kearny, New Jersey.
Dec. 31

Sanitary and household waste were being discharged directly into the Passaic River from Houseboat docked at this location. Legal action had been previously started by the Commissioners and the Court had issued an Injunction against the Edelbocks on September 24, 1969.

On May 14, 1970, the Commissioners' Attorney wrote to the Edelbocks, advising them of the Restraining Order, and informing them they were not complying with the terms of the Order. He also advised that if the pollution was not abated by the Commissioners' meeting of May 28, 1970, he would recommend contempt proceedings. Since the pollution was not abated by the above date, Counsel was directed to proceed with any legal steps necessary to halt the pollution.

On September 18th, Judge Lynch told Mr. Edelbock that if pollution was not halted within one week, he would order the houseboat closed, and he advised Mr. Edelbock to report on how long he would need to remove his things from the houseboat. Mr. Edelbock said he would install a septic tank by the following week. Mr. Lubetkin reported to the Court that a septic tank was not satisfactory and would not halt the pollution. The Judge carried the matter to September 25th.

On September 25th, Mr. Edelbock reported that he had installed a tank on the boat and there is no connection to the river. The Judge carried the case to October 9th, to give the Commissioners a chance to inspect and report. Inspection revealed that said tank was installed, but questions as to how the tank would be emptied and where the waste would go remained unanswered. Mr. Lubetkin informed the court that this was unsatisfactory, as the tank would have to be emptied often (depending on usage), and the probability is that it would be emptied or overflow into the river, since there appeared to be no practical way to empty it. Subsequent examination revealed a hole was in bottom of tank so sewage ran into river.

The court ordered Edelbock off the barge by November 9, and when he did not obey, the court ordered the Sheriff to apprehend and incarcerate the defendant.

As of the end of December, Mr. Edelbock had not been apprehended and his wife, who said she wished to move from the barge but Mr. Edelbock would not make arrangements, still lives on the barge and pollution continues.

April 1 Violation-Garden State Paper Company, Garfield,
to New Jersey.
Dec.31

Inter- Intermittent pollution from this company occurred due
mit- to accidental spills and poor housekeeping. When previous-
tent ly informed of this matter, many corrective steps were taken,
such as regrading, reconnecting certain areas to the sani-
itary sewer, etc.

On September 24th, Mr. Lubetkin wrote to this company,
informing them that work done to date on eliminating this
problem has been inadequate, since three of the last four
samples were polluting. Mr. Lubetkin requested information
on what further steps will be taken to halt this pollution
and a time table showing when it will be accomplished.

On October 20th, Mr. Finnegan, Plant Manager, wrote to
the Commissioners giving Mr. Lubetkin details as to what has
been done such as further regrading, periodic cleanups, re-
piping and sampling. They also stated that the sewer at the
chemical tank filling area will be divorced from the storm
sewer at the time of their installation of a new pulper which
will be completed by April 1971. This violation will not be
considered eliminated until this final piece of work is
finished.

No pollution was recorded from this company during
November and December.

Dec. Violation-Glerum Concrete Corporation, 195 Sargent Ave.,
1-31 Clifton, New Jersey.

Washings from trucks were running into the Athenia
Storm Sewer thence to Weasel Brook. A sample taken Decem-
ber 10th, was analyzed and found to be highly polluting.
Mr. Arts of this company was informed by the inspector of
this violation. He told the inspector that he would make
arrangements to remove this waste from the storm sewer. The
plant was not in operation from December 16th to the end of
the month therefore the inspector could not determine what,
if anything had been done to halt this pollution.

Oct.28 Violation-Houdaille Construction Material Corp.,
to Notch Road, Montclair Heights, New Jersey.
Dec.31

The discharge from this plant to Pearl Brook was found
to be turbid and polluting. On October 28th, the inspector
informed this company of the problem and was told the set-
tling pits had to be cleaned.

Houdaille Construction Material Corp. continued

On November 6, the company wrote to Mr. Lubetkin, stating that they would clean the ponds shortly and would henceforth keep them clean. Due to bad weather, this cleaning was delayed until November 23rd. However, samples of their discharge taken December 1, December 9, and again on December 15, showed that pollution continued, despite the cleaning of their settling pits.

On December 21st, Mr. Lubetkin wrote a letter to the company, informing them of the continued pollution and ordering them to halt the pollution at once. As of the end of December, the Commissioners have not received a reply to their letter, and the pollution continues.

**Inter-
mittent**Violation - Borough of Lodi, Hendrick's Pump Station

In 1969, failures of pumps and electrical equipment in the Hendrick's Pump Station allowed intermittent overflows to Saddle River. The Commissioners requested that the Borough install a spare pump and repair and install electrical equipment, so that breakdowns would be less frequent, and when they occurred there would be no overflow to the river. When the Borough failed to act on this request, the Commissioners took legal action, and a Judgment was entered on December 3, 1969, requiring the Borough to make the requested changes. The Court gave the Borough 12 months to implement the order.

Since no work had been started on this project, Mr. Lubetkin wrote to the Borough on August 5th, informing them of the intermittent overflows and directing them to halt this pollution. On August 6th, Mr. Gasalberti, Borough Manager, called Mr. Lubetkin and explained he was trying to get various industries in the Borough to finance the necessary work, and this was delaying the matter. On August 24th, Mr. Lubetkin again wrote to Mr. Gasalberti, pointing out that the time allowed in the Judgment is passing, and requesting an immediate progress report. On August 25th, Mr. Gasalberti submitted copies of correspondence to various industries and stated that there will be a meeting of Mayor and Council on September 8th, and a resolution would be introduced to appropriate emergency funds for this project. Mr. Lubetkin contacted Mr. Gasalberti by telephone, asking for a resume of equipment to be installed, plus a time table indicating completion of the project, taking into account delivery of material. On August 31st, Mr. Gasalberti replied, indicating they intend work should be completed by the end of the year.

Since, at their Council meeting of September 8th, the resolution appropriating funds for this work was not passed, Mr. Lubetkin wrote again on September 14th, asking to be informed of the present schedule to conform with the Court Order. Mr. Gasalberti telephoned and said he would get the information from the Engineer on time of installation, and forward this to Mr. Lubetkin as soon as possible. However, the Commissioners received no correspondence from the Borough. The Inspector reported that at a special meeting on October 19th, money was allocated for the repair work.

Borough of Lodi continued

Mr. Segreto, the Commissioners' Counsel, wrote to the Borough of Lodi on November 5th, and Mr. Gasalberti replied to him on November 16th, stating that bids for renovating the Hendrick's Pump Station would be received on December 7th. Contracts were awarded on December 9, 1970 to Burrows Well Drilling Co., Inc. to furnish and install a 2,500 g.p.m. pump and appurtenances, and to H. Stamato, Inc. to furnish and install new control equipment for the entire pumping station.

As of the end of December, no visible work had started.

Dec.
14-31

Violation - Town of Lyndhurst - Lake Avenue Storm Sewer

Samples taken of the discharge of the Lake Avenue storm sewer into the Passaic River on December 14, 15, 21, and 29 were analyzed and found polluting. (A sample taken December 16th was satisfactory).

Mr. Lubetkin wrote a letter to the Town of Lyndhurst, Department of Public Works, on December 21st, directing them to determine the source of pollution and have it halted at once. As of the end of December, the Town had not replied to this letter.

Dec.
15 &
29

Violation - Northwest Bergen Treatment Plant

The effluent from the sewage treatment plant, which has been in operation approximately one year, discharges into Hohokus Brook, a tributary of the Passaic River. The Commissioners sample this discharge weekly and generally the effluent is satisfactory. However, the sample taken on December 15th had a coliform count of 600/100 ml. and the sample taken on December 29th had a B.O.D. reading of 40 mg/l, both unsatisfactory. The Inspector notified Mr. G. Baer, the Operator.

Inter-
mittent

Violation - City of Orange, Washington Street Storm Sewer

This is an intermittent violation. E. T. Killam Associates had originally recommended a complete rebuilding of this sewer to eliminate the pollution, but the cost was considered too high by the City. Instead, the City plugged openings and repaired cracks to halt the pollution. They also installed a chlorination station to disinfect that sewage which they were unable to prevent from leaching into the system. For a period of time, samples were satisfactory, then samples were intermittently bad, as plugs fell out and cracks opened. Repairs are made as needed. During the month of December, samples taken of the discharge on December 1, 9, and 15 were unsatisfactory, and a sample taken on December 29, was satisfactory.

Dec.1 Violation - Public Service Gas Company, 200 East 5th
to Street, Paterson, New Jersey
Dec.31

Inter- Samples of the discharge of this company to the Passaic
mit- River were analyzed and found to be polluting. The samples
tent had a strong odor of gas and contained C.O.D. and B.O.D. above
 acceptable limits. On December 2, 1970, Mr. Lubetkin wrote to
 the company, informing them of this pollution and directing
 them to halt the pollution at once. On December 14th, the
 company wrote to the Passaic Valley Sewerage Commissioners,
 informing them that as of December 11th, the waste was now
 diverted to the sanitary sewer. On December 18th, Mr. Lubetkin
 wrote to the company, informing them that in accordance with
 N.J.R.S. 58:14-11, the Passaic Valley Sewerage Commissioners
 are prohibited from receiving wastes from gas works, and that
 they were therefore directed to immediately discontinue the
 discharge to the sanitary sewer. They were directed to treat
 the waste, so that it would be non-polluting and discharge it
 to the Passaic River.

On December 22nd, a communication was received by the
Commissioners, informing them that as of December 21, 1970,
the waste from the Paterson Gas Plant was diverted from the
sewer to the river. Further samples will be taken to determine
pollution.

Oct.1 Violation - Standard Carlton Hill Properties, 2 Carlton
to Avenue, East Rutherford, New Jersey
Dec.31

Inter- Polluting material is being discharged from the property
mit- belonging to this company through the Carlton Hill Storm Sewer
tent during rainstorms.

Mr. Lubetkin wrote to the owners on October 19th, concern-
ing this matter. On October 23rd, Mr. Lubetkin received a let-
ter stating new managers were taking charge of this property
starting November 1st, and they would investigate the situation
immediately and make whatever corrections that are necessary
to halt any pollution.

On November 3rd, the James E. Hanson Management Company
wrote to the Commissioners, stating they anticipate having
their sewer cleaned by November 20th, which in their opinion
would eliminate the pollution from their property. Nothing
had been done by the end of November, therefore, Mr. Lubetkin
wrote another letter on December 1st, informing them that if
work is not started by December 17th, the matter would be
turned over to the Commissioners' Counsel for legal action.

On December 3rd, the Commissioners received acknowledgement
and a statement that they would endeavor to complete the project
prior to December 17th.

Standard Carlton Hill continued

Mr. Lubetkin received a telephone call on December 14th, informing him that due to the illness of Mr. Wilson, work is delayed, but it would start as soon as Mr. Wilson returned from the Hospital.

Work did start on cleaning sewer lines, etc. on December 17th, and work continued to the end of December.

Jan.1 Violation - Ten-da Brand Foods, Inc., 176 Saddle River
to Road, South Hackensack, New Jersey
Dec.31

Washings from meat cutting operations are still entering into Feld's Brook from this company. A sewer line is in the process of being laid in South Hackensack to connect to the Lodi Sanitary Sewer. As of the end of July, the sewer to the proposed pumping station near Feld's Brook had been almost completed. In a letter, dated October 23rd, to the Commissioners, Mr. K. Job, Township Engineer, stated that 90% of the pumping station is completed and he expected the entire project to be completed by the end of November, at which time the various property owners would be notified that they can make the tie-in.

Work was not completed by the end of November, and on December 11th, Mr. Job wrote another letter to the Commissioners in response to Mr. Lubetkin's request of December 1, 1970, explaining the delay is being caused by a relocation of a water main in Saddle River Avenue. This was completed November 27th and the gravity sewer line subsequently installed. Mr. Job stated that he expected all the work (including the force main connection to the Lodi main) will be completed in January, and the connections can be made immediately thereafter.

PART II

The following are pollutions that occurred during the year 1970, but which were corrected by the end of the year. The pollutions are listed by location of the source of the pollution by counties, and alphabetically within counties.

BERGEN COUNTY

Violations and Eliminations - Artic Ice and Fuel Company,
158 Semel Avenue, Garfield, New Jersey

June 16 Oil in Fleischer's Brook was traced to this company by Inspector John Perrapato. Investigation revealed that a storage tank was overfilled and approximately 100 gallons of fuel oil ran into a drain, underneath the storage tanks, which empty directly into Fleischer's Brook. The company was directed to halt the pollution and correct the source of pollution, so that there would not be a recurrence. On June 29, the company informed the Commissioners that they have sealed the drain which allowed the discharge to enter into the stream.

Aug. 12-31 A subsequent violation was again traced to this company by Inspector J. Perrapato, and it was found that in the process of cleaning up the yard, polluting material was washed through a ditch to a storm drain on the Pacific Avenue side. The plant foreman had the ditch filled, and dirt and sand was spread in the area to prevent any further flow to the river. The storm drain was cleaned of residual oil. The final drain to the brook was sealed on August 31, 1970.

Nov. 16 On November 16, oil was again traced to this company and it was discovered that a seal on one of the yard drains needed repair. The drain was resealed, eliminating the pollution.

Violation and Elimination - A. Baresi, 341 Hudson Street,
Hackensack, New Jersey

June 19 A heavy pollution in Westerly Brook was traced to an excavation on former Maywood Chemical Company's property. Inspector J. Perrapato found a contractor pumping stagnant polluting water from the excavation into Westerly Brook. The Inspector immediately contacted Mr. Lubetkin, who directed him to have the contractor halt the discharge at once. Mr. Lubetkin also immediately sent a telegram to the contractor, directing him to halt the illegal discharge. On June 23rd, Mr. Baresi wrote to the Commissioners, advising them that they have stopped pumping polluting material into Westerly Brook, as per the Commissioners' instructions.

Violation and Elimination - Dale Brook Finishing Company,
Hollywood Avenue, Hohokus, New Jersey

This company maintains and operates an activated sludge plant which discharges into Hohokus Brook. The Commissioners monitor the discharge of this plant into this brook (a tributary of the Passaic River). During 1970, 19 samples of their effluent were taken and analyzed by the Commissioners' personnel, of which five were unsatisfactory, as follows:

- Jan. Sample taken had a C.O.D. of 259 mg/l. Follow-up sample of
27 February 9 was satisfactory.
- March Sample taken had a C.O.D. of 121 mg/l and had a slight septic
19 odor. Their consultant, Edward R. Grich, was contacted, and after investigation, he reported this as a temporary plant upset. Follow-up sample of April 1 was satisfactory.
- May Sample had a slightly high C.O.D. (110 mg/l). The company
27 was informed and follow-up sample of June 10 was satisfactory.
- Nov. Sample had a C.O.D. of 197 mg/l. Subsequent sample of De-
18 cember 2nd was satisfactory.
- Dec. Sample had a C.O.D. of 256 mg/l and suspended solids of 37
16 mg/l. In a letter to the Commissioners, they explained high C.O.D. was due to experimental work they were doing in the plant. Due to problems attached to this experimental work, they have discontinued its use, and treatment plant problem was eliminated as of December 17th.

Violation and Elimination - Drico Industrial Corporation, 480
Main Street, Wallington, New Jersey

- Oct. A green substance with high C.O.D. and B.O.D. was overflowing
7 from settling pits from this company to the Main Avenue Storm
to Sewer of Wallington, thence to Feld's Brook, and was discovered
Nov. by Inspector F. Cupo. In addition, a broken sewer on their pro-
13 perty was allowing raw sewage to enter Feld's Brook, a tributary of the Passaic River.

In a letter dated October 20th, in reply to the Commissioners' direction, this company agreed to get a contractor and have complete abatement of pollution by November 5, 1970.

The company sealed the pits, repaired the sewer, and diverted the material to the sanitary sewer, so as not to overflow facilities to the storm sewer, thus eliminating the violation.

Violation and Elimination - Fairlawn Radburn Treatment Plant

This is a secondary treatment plant, recently converted to activated sludge , from a trickling filter plant.

The average daily flow is approximately 1.3 M.G.D. with the discharge going to Saddle River, a tributary of the Passaic River. The licensed operator is Donald Eelman. During 1970, the Commissioners' Department of Sanitation Control sampled the effluent from this plant 41 times, of which 11 samples were unsatisfactory, as follows:

Feb. 25: M.P.N. 20 B. coli/ml; C.O.D. = 115 mg/l
 March 4: M.P.N. 5 B. coli/ml; S.S. = 80 mg/l
 March 12: M.P.N. 3 B. coli/ml; C.O.D. = 105 mg/l; Turb. = 52 units;
 S.S. = 74 mg/l
 April 22: C.O.D. = 165 mg/l; B.O.D. = 81 mg/l; S.S. = 63 mg/l;
 Turb. = 60 units
 April 29: C.O.D. = 280 mg/l; B.O.D. = 105 mg/l; S.S. = 108 mg/l;
 Turb. = 135 units
 May 19: B.O.D. = 67 mg/l
 June 30: B.O.D. = 34 mg/l; Turb. = 71 units
 July 22: M.P.N. 15 B. coli/ml; B.O.D. = 40 mg/l; Turb. = 73 units
 July 28: C.O.D. = 148; S.S. = 40; Turb. = 71 units
 Aug. 20: M.P.N. 20 B. coli/ml; B.O.D. = 54; Turb. = 61
 Dec. 2: C.O.D. = 128; B.O.D. = 41; Turb. = 100; S.S. = 57

The very bad samples of April 22 and April 29 were due to a breakdown of their large primary clarifier which caused a plant overload. Recovery didn't take place until the middle of May.

Other marginal unsatisfactory samples could usually be traced to some repairs or adjustment of chlorine residual. The Commissioners found the plant personnel cooperative and anxious to locate and solve any problems.

Violation and Elimination - Field's Plastic and Chemical Co., Inc., 199 Garibaldi Avenue, Lodi, New Jersey

Feb. 9 A sample taken by Inspector J. Perrapato on February 9th of a discharge from this company to Millbank Brook, when analyzed showed a C.O.D. of 133 mg/l. This is considered too high by the Commissioners; however, subsequent samples taken February 18, March 5, and March 11 were all satisfactory.

Violation and Elimination - Fine Organics Company, 205
Main Street, Lodi, New Jersey

Aug. 25 A waste storage pit which ordinarily drains into the sanitary sewer could not be emptied because of a clogged drain line. River Inspector John Perrapato detected workmen pumping the contents of this pit into the Saddle River. He ordered the pumping operation to cease. The clogged line was cleared by the Hennock Company, and the pit was drained into the sanitary sewer, eliminating the violation. The company was notified by certified mail that they were not to discharge this highly polluting material to the river in the future.

July 10 to Nov. 12 Violation and Elimination - Flintkote Company, 480 Central
Avenue, East Rutherford, New Jersey

On July 10th, Inspector F. Cupo traced pollution in the Passaic River to the Flintkote Company. This company, within a factory complex, permitted yard and ditch drainage of oil and tar to collect in storage pits. Whenever it rained, the collected oil ran into storm drains on Oak Street, and from there, via the Madison Street Storm Sewer to the Passaic River.

On August 13th, in reply to Mr. Lubetkin's letter of August 7th, the manager of this firm wrote saying they have completed a program designed to eliminate the prime sources of asphalt pollution in the storm water run-off. However, subsequent inspections indicated that pollution continued during rainfall.

Mr. Lubetkin wrote the firm on August 31, again informing them of the problem and asking that they tell in detail what is being done to halt the pollution, together with a time schedule showing when this will be accomplished.

On September 22nd, after much discussion with the inspectors concerning his problems, Mr. Mortonson, Plant Manager, wrote to Mr. Lubetkin, outlining a program to eliminate pollution, and stated it would be completed on or before November 6, 1970. Inspections made November 12, and again November 18, indicated that corrective action, as outlined in previous letter had controlled the pollution from this source, thus eliminating the violation.

Violation and Elimination - G and F Service Station, 75
East Allendale Avenue, Saddle River, New Jersey

June 10 An employee of this company was seen cleaning the metal filters with a detergent, and the resultant discharge, which contained a green color along with the detergent, washed into a storm sewer, thence to Saddle River. Inspector C. DiLorenzo informed the owner that this was a violation, and the owner halted this immediately and promised that this would not happen again.

Violation and Elimination - City of Garfield

June 14 A break in the sewer occurred at Passaic Street and Palisade Avenue. Repair work was done on Sunday, June 14th, and at the request of the Commissioners, pumps were installed at two points to pump the sewage around the broken area, so the repairs could be made without by-passing any sewage to the river.

Nov.16 Oil in Fleischer's Brook was traced to a catch basin at the to end of Pacific Avenue by River Inspector J. Perrapato. At each Dec.7 rain, some of this pool of oil flowed to the brook. The City was Inter-directed to clean the catch basin before the remainder of the oil mit- reached the stream. This was completed on December 7th. Mr. tent Perrapato reported that approximately 150 gallons of fuel oil were taken from this catch basin and storm drain.

Violation and Elimination - Imperial Electro Plating, 52 Park Avenue, Lyndhurst, New Jersey

June 16 A discharge from this company of a foaming material was reaching the Passaic River through the Lake Avenue Storm Sewer. Investigation by Inspector F. Cupo revealed that a scouring tank containing an alkali silicate solution (Wyandotte 5418-0 non-phosphate) had overflowed into their storm sewerline. Plant employees were washing the material with clean water into the sewer when the Passaic Valley Sewerage Commissioners' Inspector arrived and directed them to halt this practice and clean the material without washing it to the river.

The Company officials agreed to reconnect the plating room drain to the sanitary sewer so that future accidents will not reach the river. This was completed by October 23, 1970

Violation and Elimination - B. L. Lemke, Inc., 199 Main Street, Lodi, New Jersey

June 16 During a tour of the river by the Lodi Jaycees, they saw an employee of the B. L. Lemke Company, Inc. discharging the material from barrels into Saddle River. Mr. Van Orden of the Jaycees requested that the pollution be halted, and subsequently reported the matter to Mr. Stark, Lodi's Health Director, and Mr. Perrapato, the Commissioners' River Inspector.

Mr. Perrapato investigated and reported that the drum storage area was being cleaned. The movement of the drums ruptured some rusted ones and the spillage went into Saddle River. The material was ammonia and toluene. Mr. Perrapato's opinion was that the whole thing was an accident and would not be repeated.

Violation and Elimination - Borough of Lodi

April 1 An oily film in Saddle River was traced back to the First and Passaic Street storm outlet. Oil from roads, together with melting snow, was entering the storm sewer. The Borough of Lodi's Street Department cleaned the oil from the storm drain on Corabella Avenue near First Street.

Borough of Lodi - Meta Lane Pumping Station

Dec. 2-7 Samples of Millbank Brook taken in November by the sampling crew showed the presence of chromate chromium. Inspector J. Perrapato was informed and on December 2nd, he found a flow coming from the Meta Lane pumping station into Millbank Brook. Mr. Perrapato notified the borough officials.

Upon investigation, they found a buried broken line causing the problem. The line was excavated and repaired on December 7, thus eliminating the pollution.

Violation and Elimination - Marcal Paper Mills, Inc., 1 Market Street, East Paterson, New Jersey

April 1-27 This was an intermittent violation due to spillage of material in a loading area. The company repiped the catch basin in this area to the sanitary system to eliminate this violation.

May 14 A sample of their discharge on May 14th, indicated that it contained polluting material. Subsequent samples taken May 21 and May 27, showed the discharge was satisfactory. Pollution occurs when there are spillages in certain areas which lead to the storm system, thence to the river. This company repiped the troublesome areas into the sanitary sewer. This work was completed by the end of May.

June 1 An accidental leak of oil from a heater at a fuel pump went into Drain No. 7, which thence reached the river. When this was called to the attention of Mr. Clark by Inspector J. Perrapato, he had the pumps stopped at once. The oil was removed from the drain and the seal repaired, thus eliminating the pollution by approximately 11:30 A. M. the same day.

July 1 This papermill company discharges clear water to the Passaic River, which discharge is monitored by the inspection department on a weekly basis. On July 1 and 21, samples taken at the plant were found to be turbid beyond acceptable levels. Samples taken later in the week in each case proved to be satisfactory. All of the other monitoring samples during the month were found to be non-polluting. The company will keep careful check of this discharge.

Oct. 29 This company had a sewer blockage for approximately one hour (9:00 A.M. to 10:00 A.M.). During that time, material overflowed into the yard and some reached the storm drain into the Passaic River. Violation was eliminated when blockage was removed.

Violation and Elimination - S. B. Penick and Company, 540
New York Avenue, Lyndhurst, New Jersey

Nov. A discharge from this company, going through the Lake
1-24 Avenue Storm Sewer to the Passaic River, had been analyzed and
found to be polluting.

On November 2nd, Mr. Lubetkin wrote to them, directing them
to cease pollution at once. On November 5th, they replied that
they were attempting to find the source of pollution, and are
correcting a few conditions, including housekeeping.

Inspections made by Inspector F. Cupo during the time from
November 16 to November 25, and sample of November 18, indicated
pollution had been abated.

Violation and Elimination - Podell Industries, Inc., 296
Midland Avenue, Saddle Brook, New Jersey

Feb. During a heavy rainstorm on February 10, 1970, the rains washed
10 outside paint colors into storm drain, thence to Schroeder's
Brook. Inspector John Perrapato talked to the owners who immedi-
ately assigned employees to clean the area, thus eliminating the
pollution.

Violation and Elimination - Ridgewood Pollution Control Plant,
Village of Ridgewood, New Jersey

This plant is an activated sludge plant with an average flow
of approximately 3.5 M.G.D., discharged to Saddle River. The
licensed operator is John LaGrossa. During 1969 many samples in-
dicated coliform in the final effluent, despite a sufficient chlorine
residual. Therefore, on January 9, 1970, Mr. Lubetkin wrote to
the Borough of Ridgewood, explaining the situation, and asking
what the Borough intends to do to improve its results.

On January 19th, the Commissioners received a reply from Mr.
LaGrossa, explaining that soon after October 1, 1969 many process
changes were made in the plant and sludge handling to improve treat-
ment. He also explained that dye tests were made of the chlorine
contact tanks and short circuiting was noted. Baffles were in-
stalled in one tank with improvement, and they intended to baffle
the remaining three tanks early in 1970. This was completed by
February 20, 1970.

Of the 44 samples of effluent of this plant, two, May 19th
with 45 mg/l S.S. and a B. Coli. of 5/ml, and December 15th with
a B.O.D. of 44, were unsatisfactory, although 7 others were mar-
ginal on coliform count. Both unsatisfactory samples were ex-
plained in that a final clarifier was down for repairs. All other
samples were satisfactory. Plant personnel are very cooperative.

Violation and Elimination - Royce Chemical Company,
Carlton Avenue, East Rutherford, New Jersey

Sept. 2-3 Inspector F. Cupo traced pollution in the Carlton Hill Storm Sewer to this company. On September 2nd at 8:00 P.M., there was an accidental spill of pine oil which occurred while unloading a tank. The material overflowed into the cooling water sump, which thence is pumped to the Carlton Hill storm ditch, which thence reaches the Passaic River. The company was warned to be more careful in the future.

Violation and Elimination - Sandvik Steel Company, Inc.,
17-02 Nevins Road, Fairlawn, New Jersey

March 25 Inspector C. DiLorenzo traced a white substance in Henderson Brook to this company. Poor housekeeping was the reason for pollution, as employees carelessly allowed waste from machinery used for polishing operations to spill over onto floor and thence to floor drains. Plant Manager Raymond DeLuca had this practice stopped immediately and informed Inspector DiLorenzo that it would not happen again.

Violation and Elimination - Stepan Chemical Company, Maywood
Division, 100 West Hunter Avenue, Maywood, New Jersey

July 14 A rupture of an industrial sanitary sewer line allowed a chromium compound to discharge to Westerly Brook, producing a gray color in the brook and a strong odor of lemon extract. The line was completely repaired the same day, eliminating the pollution.

Sept. 14 A strong aromatic odor was found intermittently in the discharges from this company to Stink Creek and Westerly Brook. The turbidity was slightly high, although C.O.D. and B.O.D. were in the acceptable range.

Oct.
7

On September 28th, Mr. Lubetkin wrote to the company, asking what they are doing to halt the pollution, and asking for a time schedule showing when this would be accomplished. The company replied on September 30th, stating that the discharges were accidental and they would repipe the area to prevent future accidents. However, on October 2nd, another overflow occurred and the company agreed to clean its lines so that this source of pollution would be eliminated. Although production was curtailed as of October 2nd, so as to halt the immediate pollution, work was not completed on the sewer lines until October 7th.

Violation and Elimination - Tenneco Chemicals, Inc., Heyden Division, 390 River Drive, Garfield, New Jersey

Jan.1 This violation occurred because of floor drain connections
to to a 15 inch line on Hudson Street, and intermittently polluting
March material from spills mixed with river water in their 21 inch and
31 24 inch lines discharging into the Passaic River. Two industrial
Inter- waste lines and floor drains have now been isolated from river
mit- cooling water and reconnected into the sanitary sewer.
tent

Violation and Elimination - Texaco, Inc., 830 Boylston Street, Brookline, Massachusetts

June A tank truck rolled into Goffle Brook while the driver was
26 attempting to turn his truck around in a parking center at Goodwin Avenue, Midland Park. The tank ruptured slightly and gasoline trickled into the brook. This continued for approximately 3 hours before the truck was removed, and local firemen washed residue gasoline on the banks into the brook.

Jan. Violation and Elimination - United Parcel Service, Midland
1 Avenue, Saddle Brook, New Jersey

to
16 Pollution in Fleischer's Brook was traced to this company by Inspector J. Perrapato. The violation consisted of the wash water from truck cleaning operations entering into Fleischer's Brook through storm drains. The company changed the location for truck washings, thus preventing flow from entering floor drains, and thence to storm drains and into brook.

ESSEX COUNTYViolations and Eliminations - Atlantic Chemical Corporation,
10 Kingsland Road, Nutley, New Jersey

This company is a manufacturer of coal-tar intermediates and dye stuffs, and as such there is a considerable amount of highly colored dyes on its premises and in its wastes, (which normally goes to the Clifton sewer). During 1969, there were several accidents which caused pollution of Third River, a tributary of the Passaic River. During 1970, the following pollutions were traced to this company:

- June 2 A red dye in Third River was traced to this company by River Inspector D. Miele, Jr. Investigation revealed a blockage in their sanitary sewer, causing an overflow into the storm sewer. The Roto-Rooter people were called and the blockage was cleared at 2:35 P. M. on June 2, the same day, thus eliminating the violation.
- June 19 Mr. Richardson, Plumbing Inspector of Clifton, detected a pollution and traced it to this company on June 19th. In a letter dated June 29th, from the company to Mr. Richardson, it was explained that a drum of liquid dye fell from a moving fork lift truck and ruptured directly over the yard storm drain.
- Aug. 1 Previous blockages of the Clifton sewer had caused a back-up of the waste from this company to overflow on the ground, saturating it with various dyes. During rain periods and after, to 31 when ground water was flowing into Third River, the residual dye was washed into the river causing a color. However, the violation eliminated itself, as the dye was washed away, and at the end of the month the seepage was of high enough quality to be classified as non-polluting.
- Sept. 1-18 Red dye seeping through the ground was intermittently entering a storm sewer, thence to Third River, from the property of this plant. It was traced to an open pit, where the dye was collecting. The company enlarged the pit, making it a sump, lining it and installing a sump pump to pump the material to the sanitary sewer, thus eliminating the pollution.
- Dec. 4 Inspector D. Miele again traced a red dye in Third River to this plant. Mr. Miele reported that the pollution occurred because a drum of red dye fell from the tailgate of a truck and ruptured. The dye flowed to a storm sewer, thence to the river.
- Dec. 10 Again dye was traced to this company. It was caused by a holding pit overflowing because of a blocked sewer. A plumber cleared the line the same day. Blockage was in effect from about 9:30 A. M. to 12:45 P. M. Mr. Danziger (Vice President of Engineering) made arrangements to routinely clean this line to prevent future blockages.

Atlantic Chemical Corporation continued

Mr. Lubetkin wrote to this company on December 16th, asking what they intend to do to halt these intermittent pollutions. On December 21st, the Executive Vice President replied, stating they were concerned about prevention of pollution and they always cooperate in taking prompt corrective action. He then listed some preventive maintenance programs to eliminate or reduce the pollution.

Violation and Elimination - Charter Bulk Service, Inc.,
80 Doremus Avenue, Newark, New Jersey

Jan. 1 This company, in its operations, cleans a large number of
to tank trucks each day. Inspector J. McLaughlin noted that a
July 14 great deal of chemical liquid waste and washings from the tank
trailers flowed onto ground areas, and thence to the river. The
company was directed to halt pollution in a letter from Mr. Lubetkin dated September 10, 1969. When nothing of significance was done, the Commissioners started legal action, and on February 28, 1970 an Order to Show Cause, returnable on March 13, 1970, was issued by the Superior Court of New Jersey. The matter was postponed until July 17, 1970, on consent of the Commissioners' Attorney. During a conference held in the Commissioners' office with Mr. Lubetkin, this firm agreed to have the pollution abated by June 1, 1970. This was confirmed in the letter to the Commissioners dated April 20, 1970.

During the month of June, a connection was made into the Newark Sanitary Sewer and one area was piped, so that it would drain to the sanitary sewer. As of the end of June, approximately 50% of the waste was entering the Newark System and the remaining 50% was still polluting the Passaic River.

During July, a tank was constructed to catch the remaining waste prior to discharge to the Newark sewer. All work was completed and pollution halted on July 14, 1970.

Violation and Elimination - Fairmount Chemical Company, 117
Blanchard Street, Newark, N. J., and City of Newark, Blanchard
Street Sanitary Sewer

April 3-6 On April 3rd, while checking Blanchard Street, Mr. Lubetkin noticed industrial waste from this company overflowing from a manhole into a storm sewer, thence to the Passaic River. A blockage in the Blanchard Street sewer was the reason. Industrial waste from Fairmont Chemical Company was also being pumped into the street because of the same blockage. Mr. Lubetkin contacted Mr. Ben Krusch, Department of Public Works of the City of Newark, and requested he make repairs immediately. The LaFera Contracting Company, hired by the City, removed blockage and left sanitary sewer open at this point, the manhole being temporarily covered with steel plates. The work was completed along with present construction contract. Violation occurred April 3, 1970 at 10:00 A.M. and was eliminated April 6, 1970 at 3:00 P.M.

Violation and Elimination - Fluid Chemical Company, 878
Mt. Prospect Avenue, Newark, New Jersey

March 25 Mr. Lubetkin, while at the Commissioners' Second River Yard, noticed a large amount of foam in Second River. He, together with Mr. Andolino, Sr., traced this back to the Fluid Chemical Company. This violation consisted of a discharge of "20 gallons of bubble bath" into a catch basin which empties into the Second River. The result was mountains of suds in the Second River and the Passaic River. This was due to carelessness on the part of employees, who were washing out a pipe line, and instead of connecting hose to sanitary sewer, they let it run over the railroad tracks into a small ditch which runs into a catch basin on Mt. Prospect Avenue, Newark.

On March 26, 1970, Chief Engineer Lubetkin wrote a letter to Mr. Andrew Catenzaro, Plant Engineer, informing him that this discharge is illegal and asking him to write to the Commissioners, informing them what the company would do to see that this type of accident does not recur. Mr. Lubetkin notified the company that a recurrence of this could subject the company to legal action and a fine.

Violation - Frankie's Futuramic Car Wash, 305 Broad Street,
Bloomfield, New Jersey

Aug. 18 Following up a telephone complaint, soap suds in Second River was traced to this car wash by Inspector D. Miele, Jr.
to Soapy wash water was being discharged from this company to a storm sewer and thence to Second River. On August 20th, Mr. Lubetkin wrote to this company, directing them to halt this pollution at once. On September 10th, the Commissioners received a letter from this company, enclosing a copy of an application that was made to connect to the sanitary sewer dated April 11. In this letter, Mr. Scalera explained that he needed the signatures of three engineers (Bloomfield, Glen Ridge and Montclair), as the sewer is jointly owned and maintained by the Third River Committee. To that date he had been unable to obtain all three signatures, and even though he expected the physical work to take about six hours, he was unable to proceed.

Mr. Lubetkin wrote to the engineers on September 23rd, explaining the situation and the pollution problem. On September 25th, the engineer of Bloomfield replied, thanking the Commissioners for calling the matter to their attention, and stating that the engineer's signatures had been obtained, and only the Commissioners signatures were necessary, which he expected to get October 5th. This was done, and on October 6th, the connection was made, eliminating this pollution.

Violation and Elimination - Getty Oil Company, 86 Doremus Avenue, Newark, New Jersey

Sept. 1-11 Discharges from the 6" pipe (storm), located on this company's premises, were flowing during dry weather and carried with it polluting material. Mr. Lubetkin wrote them a letter on September 8th, directing them to halt pollution. On September 9th they replied that the pollution in question was coming from Charter Bulk and was being carried to the Getty property by water from a broken water main. The water main was repaired and all discharges from this line ceased.

Violation and Elimination - Hoffman-La Roche, Inc., Nutley, New Jersey

Nov. 23 to 24 On November 24th, River Inspector D. Miele traced a white material in Yantacaw Pond to the former Paisley Products plant, which had been taken over by Hoffman-LaRoche. Hoffman-LaRoche personnel were cleaning the buildings in preparation for occupancy and, not realizing that some of the old drains were connected to the storm sewer, allowed some of the cleaning material to enter them and pollute Yantacaw Pond and Third River. Upon being informed of this they halted this, and in reply to a letter sent to them by Mr. Lubetkin, they informed the Commissioners that they would trace the complete storm and sanitary system and would make any changes required to conform to good practice, to remove the possibility of accidental pollution from this plant in the future.

Jan. 1 to Oct. 28 Violation and Elimination - Walter Kidde Company, Inc., 675 Main Street, Belleville, New Jersey

The discharge of cooling water, mixed with floor and yard drains, flowed to the Passaic River. Samples analyzed by the laboratory were definitely polluting. At a conference with plant officials and Passaic Valley Sewerage Commission personnel, a plan was outlined to repipe the internal collection pits, so that they would discharge to the sanitary sewer instead of the storm sewer. In addition, the company instituted a housekeeping campaign of plant grounds to halt any pollution from materials lying around and being washed by rain water to the river. Work started on the repiping during the beginning of August and was completed October 28th, thus eliminating the violation.

Violation and Elimination - Lincoln Farm Products Corp., 305 Doremus Avenue, Newark, New Jersey

Jan. 1 to April 23 During an investigation of the pollution of Plum Creek, a tributary of the Passaic River, Inspector J. McLaughlin discovered polluting material emanating from this company. This violation consisted of the discharge of a dark gray turbid liquid from a four inch pipe to a drainage ditch which ran to Plum Creek. Mascera Contracting Company, a contractor hired by the company, re-piped this material, through a 10" pipe to the Newark City Sewer, thus eliminating this violation.

Lincoln Farm Products continued

An additional violation occurred on April 20th, at approximately 8:00 P.M., when a worker left a valve open on a tank trailer. About 20,000 gallons of liquid tallow flowed into the drainage ditch and solidified. At the insistence of the Commissioners, mechanical equipment was used to remove the solidified tallow from the drainage ditch. This was done Wednesday, April 22, 1970.

Violations and Eliminations - City of Newark

May 11 Second Avenue Storm Sewer - Inspector J. McLaughlin discovered that polluting material was being discharged into the Passaic River to from a 48" storm sewer at the foot of Passaic Street, north of June 4 Oriental Street. The City of Newark was informed of this discharge and their maintenance men, upon checking the situation, found stop logs in the chamber of Broadway and Second Avenue had to be replaced. This was done and the violation was halted.

Jan. 1 Blanchard Street Storm Sewer - During the month of July, the City of Newark reconnected all the industrial and sanitary connections from the Blanchard Street Storm Sewer and reconnected them to the new Lister Avenue sewer, thus eliminating the pollution from July 3 this sewer to the Passaic River, as per court order (see Newark's violations, Part I).

Aug. 18 Saybrook Place Storm Overflow - Sewage was overflowing from a blocked sewer into the above storm sewer which discharged to the Passaic River. River Inspector J. McLaughlin notified the Passaic Valley Sewerage Commissioners' maintenance crew, which removed the material wedged in a gate at the manhole. This eliminated the overflow to the storm sewer and ended the pollution.

Oct. 14 Herbert Place Storm Overflow - Discharge of sewage was noted at 10:00 A.M. on October 14th by Inspector J. McLaughlin. Passaic Valley Sewerage Commissioners' crew discovered a blockage and removed obstruction. Work completed at 2:00 P. M. the same day, thus eliminating the violation.

Oct. 23 Delavan Avenue Storm Sewer - Sewage was discovered going into the Passaic River at 3:00 P. M. on October 23rd, by Inspector J. to McLaughlin, from the Delavan Avenue Storm sewer. The City was 26 notified at 3:30 P. M. the same day. The City removed a blockage, which caused the overflow into the storm sewer at 11:00 A. M. on October 26th, thus eliminating the violation.

Violation and Elimination - Newark Asphalt Corp., 1500 McCarter Highway, Newark, New Jersey

April 23 This plant, normally inoperative during the winter months, is in operation approximately 4 hours a day during good weather. to Samples of the discharge to the river from this plant, taken during June 9 ing April, and again on May 12th by Inspector J. McLaughlin, indicated a very high temperature, 130° to 140° Fahrenheit, a high turbidity, and relatively high suspended solids, although C.O.D. was very low and B.O.D. was practically non-existing.

Newark Asphalt Corp. continued

On May 7th, a letter was sent to the company, informing them of their pollution. On May 8th, the Newark Asphalt Corp. replied, indicating they did not know they were polluting and would do everything necessary to halt the pollution at once. They desired information concerning the nature of pollution. On May 14th, Mr. Lubetkin wrote to the company telling the types of pollution. On May 18th, the company wrote to the Commissioners, telling what they would do to alleviate the pollution, and asking for further information. The Inspector reported that the company had installed a thermometer in their discharge pipe, and the temperature is controlled by additional well water piped through a 4" discharge pipe. A sample taken on May 26th indicated the discharge temperature to be only 74°, turbidity was within range, and only the suspended solids was slightly high. A June 9th sample was completely satisfactory.

Violation and Elimination - Newark Boxboard Company, 17
Blanchard Street, Newark, New Jersey

April 6 This violation occurred when approximately 500 gallons of paper pulp overflowed into a driveway and thence to the Blanchard Street Storm Sewer. This was the result of negligence, and Mr. R. Lewis, President, instructed his men to be more careful in the future.

Violation and Elimination - Ozite Corporation, 139 Lockwood
Street, Newark, New Jersey

March 18 to 23 This violation consisted of an industrial waste discharging into the Blanchard Street Storm Sewer. This was caused by the waste flowing from Building #60 onto ground area and along Penn-Central Railroad Spur and into catch basin on Blanchard Street. The material is composed of liquid spray adhesive used in the process of carpet manufacture. Academy Contracting Company of Newark began work on March 20, 1970 to make the proper sanitary sewer connection. Inspection by Superintendent of Inspection, Louis Cuccinello, and Inspector John McLaughlin on March 23, 1970, showed waste material now going directly into the Lockwood Street sanitary sewer, thus eliminating the violation.

Violation and Elimination - Paragon Oil Company, 2100 Hunters
Point Avenue, Long Island City, New Jersey

April 6 While making a delivery of oil to the Standard Tallow Company of Newark, the driver of the tank truck allowed oil to overflow into nearby railroad property where it leaked into the Blanchard Street Storm Sewer. Mr. Lubetkin sent the company a letter, directing them to clean the residue oil from the ditch. This was done and the violation eliminated.

Violation and Elimination - Peerless Tube Company, 71 Locust Avenue, Bloomfield, New Jersey

Jan. 20 Pollution occurred when a spill of fuel oil from an overflowing tank, went into catch basin, thence to storm sewer outlet, running through Watsessing Park. It was estimated that 15 gallons overflowed. Inspector John Brady notified Humble Oil Company to warn the carrier, Standard Trucking Company, to be more careful in the future.

Maintenance workers from Peerless Tube Company put "Oil Dry" on ground near the pipe in order to absorb any oil left near the spill.

Violation and Elimination - Pfister Chemical, Inc., Alliance Division, 33 Avenue P, Newark, New Jersey

Jan. 1 Inspector John McLaughlin reported the discharge of polluting material by this company to Plum Creek, a tributary of the Passaic River.

April 1 Considerable correspondence took place between officials of this company and Mr. Lubetkin because of the extensive amount of work that had to be done to repipe their waste, within the plant, pre-treat it, and then discharge to a new Newark Avenue P sanitary sewer.

The company kept the Commissioners informed of progress and of their good faith by producing copies of contractor's contracts and purchase orders for equipment. The final installation and tie-in to the sanitary sewer was completed April 1, 1970. Dirt fill was placed over that portion of the ditch which previously carried the flow to Plum Creek.

Violation and Elimination - Pitt-Consol Chemical Company, 191 Doremus Avenue, Newark, New Jersey

Aug. 28 This company receives #6 fuel oil by barge. The oil is pumped through a 6" pipe line approximately 1,000 ft. to a storage area. About 300 gallons of the oil leaked from the pipe to a concrete trough. Before it reached the river, Inspector J. Sept. 1 McLaughlin notified officials of the company of the potential pollution. On Sunday, August 30th, the Jersey Tank Corporation began a clean-up operation for Pitt-Consol, which was completed by Tuesday, September 1. The oil in the trough was pumped into a tank truck and workmen cleaned the trough with dry cinders. The pipeline was also repaired, so there would not be a repetition of oil spill.

Violation and Elimination - Revere Smelting and Refining Corporation, 387 Avenue P, Newark, N. J.

Jan. This violation consisted of liquid acid battery waste entering
1 into Plum Creek, a tributary of the Passaic River. The company
to has installed stainless steel equipment to catch material for
March treatment before discharge. Elimination was made on March 6,
6 1970.

Violations and Eliminations - Rheingold Breweries, Inc.,
119 Hill Street, Orange, New Jersey

April Oil in the Washington Street Sewer was traced back to this com-
1 pany by Inspector J. Brady. The Inspector was informed that while
one of their trucks was being filled with diesel fuel, the driver
went inside the building and the tank overflowed. Mr. Walz, Plant
Manager, was informed that this was a serious violation, and steps
should be taken to prevent a recurrence of this type of accident.

Oct. Fuel oil in Second River was reported to Superintendent of
9 Inspection, L. Cuccinello, on Friday, October 9th. He sent In-
spector J. Brady to investigate. It was discovered that a fuel
line at this brewery broke, and fuel oil reached the Washington
Street Storm Sewer, thence to Second River. The line was re-
paired the same day and the pollution halted.

Dec. Polluting material in the Washington Street Storm Sewer was
9 traced back to this company by Inspector J. Brady. It was dis-
covered that plant personnel were washing barrels in the yard
over storm drains. Mr. Lubetkin sent a letter to Rheingold to
halt this practice. In a reply dated December 23rd, Mr. Lower,
General Plant Manager, thanked the Commissioners for bringing the
matter to his attention, and he explained this is being halted
immediately.

Violation and Elimination - Thomas Smith (Houseboat), 1500
McCarter Highway, Newark, New Jersey

Jan. Small amounts of sanitary and household waste discharged
1 into the Passaic River from this houseboat. Mr. Smith installed
to a holding tank and arranged to have the material discharged into
Dec. the sanitary sewer. Inspector McLaughlin will keep this under
11 constant observation.

Violation and Elimination - Standard Tallow Company, 61 Blan-
chard Street, Newark, New Jersey

March Samples taken by Inspector J. McLaughlin of a discharge to
3 the Passaic River were analyzed and found polluting. This viola-
to tion was caused by boiler steam condensate flowing across the yard,
April carrying oil and grease into the catch basin on Blanchard Street,
1 Newark, and continuing to the Passaic River.

- Standard Tallow Company continued

Mr. Lubetkin wrote a letter to the company on March 4, 1970 and received return letters from Mr. Block on March 9 and March 11, 1970, assuring Mr. Lubetkin of full cooperation to eliminate this problem. The work of repiping boiler water to the sanitary sewer was completed on April 1, 1970.

Violation and Elimination - Westinghouse Electric Corporation, 720 Washington Avenue, Belleville, New Jersey

Jan. 1 This violation, discovered by Superintendent of River Inspection, L. Cuccinello, consisted of industrial waste being discharged into the Belleville-Nutley storm sewer, thence to the Passaic River.
25 This discharge was caused by a break in a six inch storm line. Repairs were completed at 4:00 P.M. on Sunday, January 25th, made by Jung Brothers, Inc. of 15 Newark Way, Maplewood, N. J., to the 6 inch storm sewer line and also to a 4 inch sanitary line. The company also had a crew wash down the ditch with fire hoses and clean out all traces of the green discharge.

Violation and Elimination - Westinghouse Electric Company, 1 Westinghouse Plaza, Bloomfield, New Jersey

April 14 A white-gray milky material was noticed by Inspector J. Brady in Second River and traced back to this company. It was discovered that an employee was washing a machine with a soap solution and the discharge was going to a storm sewer. Mr. Hanzel, the Plant Engineer, promised this would not happen again.

HUDSON COUNTY

Violation and Elimination - Diamond Shamrock Chemical Company, Harrison, New Jersey

- Jan. A discharge from this company to the Passaic River from
1 their outlet #2 was analyzed and found to be highly polluting.
to It contained ethyl alcohol and at times diethyl ether with ex-
Feb. ceedingly high C.O.D.'s. In a letter dated December 8, 1969,
18 Mr. Lubetkin directed this company to cease pollution at once.
The company replied in a letter dated December 18, 1969, that
they had learned the source of the pollution and would divert
it to the industrial sewer, but due to the extensive underground
work, they did not expect to have the work completed before
May 1, 1970. Mr. Lubetkin requested faster work, and also tem-
porary steps to halt pollution while major work was completed.
The company cooperated and all work to halt this pollution was
completed February 18, 1970.
- Oct. On the above date, Inspector J. Colello reported there
13 was a spill of a detergent which reached the river through a catch
basin, causing foam in the river. The company was warned to be
more careful in the future.

Violation and Elimination - Kramer Chemical, Inc., Jacobus Avenue, South Kearny, New Jersey

- Jan. This violation occurred because of company policy of
1-5 washing drums and allowing an acid waste wash solution to enter
into the Passaic River. Mr. Verti, Plant Superintendent, had as-
sured River Inspector R. Bingham that the practice of washing
drums by the above method had been discontinued as of January 5,
1970, thus eliminating the violation. This was verified by the
Inspector. The plant subsequently moved this operation from
this location.

PASSAIC COUNTY

Mar. Violation and Elimination- Allied Textile Printers,
16- 1 Van Houten Street, Paterson, New Jersey- This violation
25 was the by-passing of industrial waste into the Passaic Ri-
 ver. This was claimed necessary by the City of Paterson due
Inter- to a break in the 36 inch sewer-line located on Van Houten
mit- Street, (see City of Paterson Sewer). The sewer line was
tent completely repaired on March 23, 1970, but Allied Textile
Printers were not permitted in the line until March 25, 1970.

Chief Engineer Lubetkin and Superintendent of Inspec-
tion Louis Cuccinello made an inspection on March 26, 1970,
and found everything to be in order at the plant.

Apr. Violation and Elimination-Associated Dye and Print Co.,
16 25 Sixth Avenue, Paterson, New Jersey. On April 16, 1970 at
10:15 A. M., a truck from the Arrow Carrier Corporation
spilled a 30 gallon drum of a yellow colored liquid dye,
while making a delivery to Associated Dye and Print Co.
Employees washed the spillage into a catch basin located on
this street, which discharges into the Passaic River caus-
ing discoloration and pollution. Mr. Geoghegan, Plant En-
gineer, instructed personnel concerning any future accidents.
Sand or saw dust will be used for liquid spills, and powder
spills will be shoveled and swept into drums instead of
hosing the area as was done.

Apr. Violation and Elimination-Automated Business Systems
30- Division of Litton Industries, 31 Styertowne Road, Clifton,
to New Jersey

May While checking the Allwood Industrial Area, Superinten-
15 dent, L. Cuccinello found that this plant had been discharg-
ing cleaning materials into a flood control sump which was
thence pumped to Styertowne Creek, a tributary of the Pas-
saic River. On May 4, Mr. Lubetkin, wrote a letter to the
company informing them that the discharge was polluting and
should be halted.

On May 6, the Commissioners were informed by the com-
pany, that this practice was being discontinued and would
not be repeated. Inspector R. Goldstein confirmed that the
polluting discharge from this company was halted.

Samuel Braen Company, Sand and Gravel Plant, 622 Goffle Road, Hawthorne, New Jersey

Inter- The Department of Environmental Protection cited this
mit- company on November 27, 1970, for polluting Goffle Brook.
tent They indicated samples taken May 13, and September 2, were
 polluting and the company was given until February 1, to halt
 pollution.

Inspector T. Costello of this district has not found any polluting samples but was told verbally that in the early part of November the sludge pit in their Asphalt Plant overflowed for a short period of time because of a breakdown of their pump. He was directed to investigate further into this matter. Mr. Lubetkin wrote to this company on December 21, asking for details of the alledged pollutional overflow in November. As of the end of the year no reply had been received by the Commissioners.

Aug. Violation and Elimination-Bunker Hill Warehouse,
6 90 Sixth Avenue, Paterson, New Jersey.

On the morning of August 6th (2:00 A.M.), boxes stored and stacked high on skids fell, one hitting a fire sprinkler pipe on the ceiling. The resultant water spray saturated boxes of soap powder, which broke, causing large amounts of suds to be washed to the storm sewer, which leads to the Sixth Avenue outlet to the Passaic River.

When Inspector L. Tateo arrived, he directed the clean up operation be toward the sanitary sewer floor drains to eliminate further pollution.

Apr. Violation and Elimination-Cadie Products Corp.,
29 100 6th. Avenue, Paterson, New Jersey.

On April 29, oil in the Passaic River was traced to a Paterson Storm overflow by Inspector L. Tateo. After notifying the City of Paterson, the Inspector with the help of Assistant Superintendent of Line, J. Kearny and his crew, lifted manhole covers on the storm sewers and finally traced the source of the overflow to the Cadie Products Corp. They were informed that this type of dump was illegal and they were directed not to repeat this pollution. On May 29, the company sent a letter to the Commissioners, in reply to Mr. Lubetkin's letter of May 13th, informing them that they would cooperate completely and would take all necessary steps to see that this type of problem would not recur.

Apr. 22 Violation and Elimination-City of Clifton-Weasel Brook at Henoch Oil Co., 515 Broad Street, Clifton, New Jersey.

A blockage in sanitary sewer line caused waste to enter Weasel Brook. The City of Clifton was notified by Inspector R. Goldstein and the line was cleared on the afternoon of the same day.

Aug. 20 to 21 Sanitary Sewer at Broad Street and Route 46, Clifton, New Jersey.

A blocked sanitary sewer at Broad Street and Route 46 was diverting sewage into Plog's Brook, and thence to Weasel Brook. Inspector R. Goldstein notified the Clifton Sewer Department. By the next day, the blockage was removed, and the pollution eliminated.

May 1 to 8 Violation and Elimination- John Dusenbery Company, Inc. 395 Allwood Road, Clifton, New Jersey.

Green color in Nichols' Pond was reported to Superintendent L. Cuccinello and Inspector R. Goldstein was assigned to trace the source. He traced it to Styertowne Creek and thence to this company. Someone from the company had dumped a 55 gallon tank of green material into the area at the rear of the plant and then washed the material to a ditch which ran to Styertowne Creek. Mr. Lubetkin sent a letter to this company on May 1, informing them that this discharge is illegal and directing them to refrain from doing this type of thing in the future. On May 19, the company replied that they have ceased that type of operation and now are using a holding tank to contain the barrels of polluting material and are disposing it through a commercial disposing source on a monthly basis. Inspections by Inspectors R. Goldstein and F. Cupo, verified this.

Apr. 9 to 10 Violation and Eliminations- Fabricolor Corporation, 24 1/2 Van Houten Street, Paterson, New Jersey.

A blockage in the industrial line at the plant caused an overflow into Storm line which discharges into Passaic River. A Roto-Rooter was used to break blockage and by 11:30 A.M., April 10th, the line was cleared.

Fabricolor Corporation continued

Apr. Dye in the Passaic River, reported to the Commissioners
15 by Mr. Albert Alfano, was traced to this plant. A telegram
to was sent to them by Mr. Lubetkin directing them to cease
17 pollution at once.

It was found that this violation was due to seepage into Passaic River from line located in vault below the plant. In order to fix pipe, operations were suspended in this company and at the American Skein Dyeing Company which also discharges into the same sewer line. The Company installed two 5f+. cast iron 10 inch pipes.

Apr. A break in a manhole caused industrial waste to enter
29 Passaic River. The factory was shut down at 4:30 P.M. and the repair of the manhole was completed by 8:00 P.M. Tests were made the following day and no leakage was found.

Dec. River Inspector, L. Tateo traced a discoloration in the
2 Passaic River at 9:30 A.M. to this company. He notified the plant president, Mr. W. Perron. The sewers were checked and an overflow caused by a sewer blockage was discovered. The line was cleared by 11 A.M. and the violation was eliminated.

Jan. Violation and Elimination - Globe Products Company, Inc.,
1 55 Webro Road, Clifton, New Jersey.

to
May This company manufactures food products, and material
15 from their deliveries and operations many times were dropped in their yard and washed through the storm drain to Mac Donald's Brook (a tributary of the Passaic River). The company after being informed of the problem finally had the polluting material piped to the Clifton sanitary sewer, thus eliminating the pollution.

Apr. Violation and Elimination - Borough of Hawthorne.

Inter- During the month of April and partly into May, intermit-
mit- tent overflows caused by-passing to the Passaic River during
tent peak flows. Investigation indicated either a partial blockage in the siphon or connection chamber. When attempting to clean chamber it was found that a partial blockage actually had occurred in the connection pipe between the chamber and the trunk sewer. This was cleared in the beginning of May and the back flow was reduced and pollution eliminated.

Aug. Violation and Elimination - Goffle Brook- Borough of Hawthorne.

During the early part of August, Johnson Bros., General Contractor of 1173 Goffle Road used heavy equipment to clean up and straighten approximately 300 feet of bank on both sides of this brook. As a result, water in Goffle Brook was discolored a light brown during this period which ended August 14, 1970.

A white discoloration of this brook was reported on August 19, at 12:20 P.M., however the Commissioners' Inspector, T. Costello, reported that it had cleared before the source could be traced.

Violations and Eliminations- Inmont Corporation, 150 Wagarow Road, Hawthorne, New Jersey.

This company manufactures fluorescein dye, which, by its very nature gives a green color to water in very dilute solutions. Since even small amounts of this waste will color the sewage green and even effect the Commissioners' effluent discharge to New York Bay, the company is required to oxidize their waste to destroy the color before discharging this material to the sanitary sewer in Hawthorne.

On occasion accidents occur and untreated waste reaches the sewer or some of the dye is washed to the river. If the dye reaches the river, it colors the river green and although it is non-toxic and not harmful to fish life it does give the appearance of great pollution.

Because of the small amount of this material that causes problems, the Commissioners police this company closely and the company is required to effect housekeeping to even keep dust from reaching its grounds where rains might let it reach the river or the sewer untreated.

Despite the above, during 1970, several events occurred which required action by the Commissioners and corrective action by the company as follows:

Inmont Chemical Corp., continued

- Mar. Green dye was detected in the Hawthorne sewage. Mr.
3 Lubetkin wrote to the Company concerning this. It was
to discovered that a leaking pump had allowed material to
12 enter the sewer through another route, by-passing the pre-
treatment system. A new pump was installed, flexible pipe
replaced by rigid pipe and many other improvements as out-
lined in a letter to Mr. Lubetkin from Mr. E.J. Aquadro,
date, March 12, 1970.
- Apr. A green color in the Passaic River was traced back to
30 this company by Inspector T. Costello. Investigation revealed
that a faulty compressor was instrumental in the improper
operation of presses. In removing the material from the presses
it was looser than normal and some fell to the floor. The
night shift personnel washed the material into the floor drain
while cleaning up, thus by-passing their pre-treatment facili-
ties. The compressor was repaired, eliminating this violation.
- Sept. A 55 gallon fiber drum, while being moved by a work-
8 man broke, and the contents, latex, spilled, and went into the
Passaic River through the storm drain, causing a bluish hue
to the river approximately 10 ft. wide, 30 ft. downstream.
The company used sweeping compound to clean up as much ma-
terial as possible.
- Oct. On Friday, October 23rd. at about 7:00 A.M., a driver
23 after completing a delivery of latex, washed hose line into
bed of railroad siding. Early morning rains washed some of
the latex into the storm drain thence to the Passaic River.
Floor sweeping compound was used to absorb remainder of la-
tex and keep it from the river. Management promised to have
drivers more careful in future.
- Dec. Green in the river was traced to this company by Supt.
9 of River Inspection, L.Cuccinello. The fluorescein was
found in their storm ditch together with a high alkaline
material (ammonia).

Process Engineer W. Chung explained that a skid con-
taining some powder was left near a storm catch basin and
surface drainage caused particles to be washed into the
river. In addition a driver making a delivery did not couple
the tank truck hose properly and had to drain the hose to
recouple it properly. It was explained that if they really
were alert to pollution problems, the hose could have been
drained into a drum instead of on the ground and also by now
they should be aware of not allowing any equipment contain-
ing fluorescein near storm outlets.

July 21 Violation and Eliminations- Kramer Chemical Company, Inc., 109 Fifth Avenue, Paterson, New Jersey.

A greyish white material in the Passaic River was traced to this company by Inspector, L. Tateo. Investigation revealed that 50 to 100 gallons of Phosphoric Acid had accidentally spilled from a tank and flowed to a yard drain thence to the river. The company was told to be more careful in the future.

Dec. 9 to 11 Violation and Eliminations-North Jersey Skein Dye Co., 21 Mill Street, Paterson, New Jersey.

Inspector L. Tateo traced a discoloration in the Paterson Tail Race to a discharge coming through the bricks of a culvert over the Tail Race at the premises of this company.

The officials of the plant was notified and the pollution was traced to a broken cast iron pipe in their cellar. A new section of pipe was installed eliminating the pollution.

Mar. 5 Violation and Eliminations-Paisley Products, Inc., 1153 Bloomfield Avenue, Clifton, New Jersey.

The violation on March, 5, 1970 was caused by accidental spill of poly-vinyl acetate to catch basin which brought about a milky looking substance in Nichols Pond in Nutley, New Jersey. This violation was caused by negligence of a truck driver making a delivery which allowed about 50 gallons of said material to enter catch basin.

Mar. 26 On March 26, 1970, another violation took place when a bad hose connection caused a spill which brought a light brown discharge to Nichols Pond. Company used a special absorbing material and put chemical in drums and hauled away material.

On March 30, 1970, Chief Engineer Lubetkin wrote a letter to the company seeking the following information:

- (1) What caused the pollution during March 26, 1970?
- (2) What is being done to prevent a recurrence of such a pollution?
- (3) What are the facts concerning their continued use of the plant in the existing location?

Plant Manager Walter Newcomb also wrote Mr. Lubetkin on March 30, 1970 describing the accident.

Paisley Products, Inc., continued

Apr. 1 A white material in Nichols Pond, Nutley was traced back
to 3 again to this company by Inspector D. Miele. This was caused
by a spillage of material which occurred when a worker made
a bad connection to a Tank Truck making a delivery. Mr. Young
of this company covered the area with an absorbing material
and promised to be more careful in the future.

May 12 Pollution in Third River was traced back to Nichols
to 13 Pond and then to the Styertowne Creek. After extensive field
tests, the Commissioners isolated the source of the major
pollution, as coming from the property of Hoffman-LaRoche.
Further work, narrowed it down to the area of the Paisley Pro-
ducts Inc., a tenant on the Hoffman La-Roche property. Mr.
Lubetkin, informed Mr. Newcomb, Plant Manager, that pollution of
the Nichols Pond had been traced to his company. This was
confirmed in a letter, dated May 13, 1970. Mr. Newcomb was
directed to do everything to locate source of pollution and
to halt it at once.

On May 15, Mr. Newcomb, wrote to Mr. Lubetkin, explain-
ing, that the pollution must have been from accidenta spills
on the floor drains, as there are no direct connectics from
his processing to the Styertowne Creek. He stated that in
order to avoid any future accidents, the floor drain were
being cemented and the area was reconnected to the sanitary
sewer. After this was accomplished the Commissioners re-
checked the area and still found polluting materia emanat-
ing from the Paisley Products Inc.

On May 21, Mr. Lubetkin, wrote to Mr. Newcomb, telling
him that despite previous changes made, pollution was still
emanating from Paisley Products, Inc. The Commissioners'
personnel helped the employees from Paisley Products locate
and isolate the pipe from which the pollution was coming.
It was subsequently found that an underground pipe approximate-
ly 250 feet long 3" in diameter, must have been somewhere
along this length and the polluting material was leaching
through the ground, reaching the drain that goes to Styer-
towne Creek. In a letter of May 25, 1970, Paisley Products
Inc., explained this and stated that it was their intention
to replace the pipe as soon as they could get an engineering
firm and as soon as the outside tank, which had approximately
5,000 gallons in material, was emptied. The polluting ma-
terial was a Poly Vinyl Acetate Monomer. On May 29, Mr. Lu-
betkin sent a telegram to Paisley Products Inc, indicating
that the pollution in Nichols Pond was critica and they were

directed to halt pollution at once if necessary halting operations and emptying tanks immediately involving the broken pipe until repairs were made. This was done and although the source of pollution was halted, residual material in the ground took about 2 months to clear.

Jan. Violation and Elimination -City of Passaic Sewer Depart-
29 ment- At Eighth Street, Passaic.

A blocked city sanitary line running through the J.L. Prescott Company property was overflowing causing sewage to enter into the Passaic River.

Inspector Reuben Goldstein notified the Passaic Sewer Department at 10:00 A.M. on January 29, 1970, and a crew assigned immediately removed blockage to bring about the elimination.

Mar. Violation and Elimination - City of Paterson.
10

to On March 10, at 2:30 P.M., a street cave-in was caused
25 by a break in a large sewer under Van Houten Street, Paterson. The City started excavation almost immediately under an emergency plan. This sewer goes to the Commissioners' Trunk sewer at Prospect Street and the Commissioners assigned a crew to keep the sand catcher clean on a continuous basis.

Mr. Lubetkin wrote to the City on March 12, directing them to make repairs as quickly as possible and requested them to install pumps and bulkheads during the repair to prevent any unnecessary by-passing of sewage to the Passaic River. Four Pumps were installed, but due to the size of job and the quantity of sewage involved intermittent by-passing was required by the City at the Allied Textile Printers' Plant, during repair work. Work was completed March 25, 1970, but final tie-in of Allied Textile Printers was not made until March 25.

Dec. At 3:00 P.M., Inspector L. Tateo discovered a manhole
1 overflowing and discharging sanitary waste to a storm catch
to basin at 4th., Avenue and Route 20, Paterson. Mr. John An-
2 derson of the city was called and his crew cleared a block-
age at 8 A.M. the next morning, eliminating the violation.

Jan. Violation and Elimination - J. L. Prescott Company,
1 45 Eighth Street, Passaic, New Jersey. This violation occur-
to red when cooling waters overflowed from an insufficiently sized
2 sanitary line onto the ground, picked up yard waste, and en-
tered the Passaic River.

J. L. Prescott Company, continued

The installation of a new sewer to carry the cooling waters directly to the river has ended the backing up of the sanitary sewer line. As soon as weather conditions permitted, a sample was taken on January 27, 1970 of the cooling water discharge to the river verifying its purity.

Jan. 12 A break in a line carrying a liquid dishwashing solution spilled and about 150 gallons of this solution escaped. The material entered the river via a yard drain. As soon as the break was discovered at 11:15 A. M., the lines were closed and repairs were made. Repairs were completed the same day.

Dec. 15 Violation and Elimination- River Barge Inn., 765 River Drive, Passaic, New Jersey.

This Barge is located in the Passaic River just north of the Commissioners' Passaic venturi property. The Barge contains two large holding tanks which are situated at the bottom of the boat. A pump discharges the waste through a flexible hose to a three inch line which thence goes to the Passaic Valley Sewerage Commissioners' trunk sewer.

On December 15., 1970, Mr. Lubetkin received a call from B. Steinberg, Plumbing Inspector of Passaic, saying that he had received a complaint that the flexible coupling was broken and sewage was being discharged into Passaic River. Superintendent L. Cuccinello, investigated and confirmed the above. Mr. Daniel Komar of the River Barge Inn was informed of the violation. Inspector R. Goldstein reported that his inspection on December 16, indicated repairs had been made and violation eliminated.

June 9 Violation and Elimination-Tidewater Realty Company, 2 Ackerman Avenue, Clifton, New Jersey.

A pump failure at a collection pit allowed industrial waste to overflow and enter a storm drain and thence reach the Passaic River. This was detected by Mr. Lubetkin and Superintendent of River Inspection, L. Cuccinello, during routine river examinations.

The pump was repaired and, in addition, the overflow line was sealed so that if the pump should fail again, the waste will reach the floor of the plant and will be noticed immediately instead of several hours later. This is expected to prevent a recurrence of this type of accident.

July 17 Violation and Elimination-United Wool Piece Dyeing and Finishing Company, Canal Street, Passaic, New Jersey.

An accidental spill by a fuel oil delivery truck caused the loss of about 25 gallons of oil in the company yard which then flowed into the Passaic River. Sand and other absorbents were introduced to remove the oil and pollution was eliminated.

Oct. Violation and Elimination, Warren Brothers Company ,
7 Planters Avenue, Prospect Park, New Jersey.

to
29

The discharge from this company to the Prospect Street Storm Sewer and thence Passaic River was polluting. The company was notified and agreed that its settling basins needed cleaning. After cleaning basins, the Commissioners again sampled effluent and again found it too turbid with too great suspended solids. The Company is now recycling water and no overflow reaches the storm sewer, thus eliminating pollution.

Violation and Elimination - West Diner, Route #46 and
Clove Road, Little Falls, New Jersey.

In December, 1960, this Diner completed the construction of a ten thousand gallon a day Infilco activated sludge treatment plant. The discharge of this plant went to Pearl Brook, a tributary of the Passaic River. During the years, 1961 and 1962, it was apparent that the plant was not operating properly. During 1962, this Diner made modifications to its sewerage treatment plant in order to bring its effluent to the limits required by the Commissioners. For a short period of time after modification, the plant appeared to operate properly, however, the operator had difficulty keeping it under control and there were intermittent marginal pollutions for some time. During 1963, the Commissioners again informed West Diner that their plant was polluting and something had to be done to halt this pollution. Other modifications were made to the plant at the suggestion of Mr. Edward R. Grich, Sanitary Chemist, hired by the Diner. The implementing of his suggestions did improve the effluent, and for a short time treatment was satisfactory, however, intermittent marginal samples did indicate occasional pollution. In 1965, the State Department of Health notified West Diner that effluent had excessive B.O.D. The operator was replaced and for a period of approximately two years, the treatment was marginal.

Finally, in 1967, the Commissioners again notified West Diner that the discharge from this plant had been polluting, and they were again requested to do what was necessary to halt pollution at once. Further modifications were made, such as larger compressors being installed during 1967, but still the plant seemed inadequate to handle the flow.

During 1968, other consulting engineers were hired and it was the final conclusion to abandon the treatment plant to see if a sewer line could be built to connect into the Clifton sewer system. Permission was received from the City of Clifton to allow the connection, but permission would also have to be granted by the Township of Little Falls to cross streets and

West Diner continued

from the State Highway Department to cross a State Highway with the sewer line. Also, easements for the sewer line has to be gotten from private parties. The whole cost was to be borne by West Diner. During the year 1968, there was numerous correspondence between the Commissioners and West Diner concerning progress of this attempted method of alleviating the pollution. On January 5, 1968, a letter was sent from the State Department of Health to the West Diner, stating that their discharge did not meet State Requirements into FW3 waters of the Passaic River Basin and suggested that the matter be referred to a consultant sanitary engineer for evaluation and recommendation. During 1968, the matter was turned over to the Commissioners' Counsel, Mr. Durkin. Mr. Durkin wrote to the Attorney for West Diner on August 5, 1968. A reply, dated August 13, 1968, claimed that reasonable progress was made and that they would continue to pursue this entire situation as rapidly as possible in order that a new sewer could be built. As of the end of 1968, this Diner was still polluting, and they stated they were awaiting the signing of an agreement with the Township of Little Falls, so that they could get a contract for the construction of the sewer.

On March 12, 1969, Mr. Lubetkin wrote to West Diner, explaining that they were still polluting, and pointing out that since West Diner had enlarged their facilities, the Commissioners feel that the attempt of reducing the pollution should be pursued with more expediency.

On March 13th, a reply sent to the Commissioners stated that all matters between the Township of Little Falls and the City of Clifton had been agreed upon, and as soon as the agreements have been prepared and signed they will apply to the State Department of Transportation for permission to run the line under Route 46 and Valley Road.

On April 14, 1969, the Commissioners were informed that West Diner had received a copy of the proposed agreement between the City of Clifton and the Township of Little Falls, and West Diner had approved it. Also, Mr. Lee T. Purcell, Consulting Engineer, was working on plans for the line,

On June 23, 1969, the Commissioners again questioned West Diner, as to the status of this work. On June 25, a reply was received, again indicating the complexity of the situation, because of the necessity to accommodate the desires of two communities as well as West Diner and the Department of Transportation. The Commissioners were told that plans for the sewer have already been prepared by their Consulting Engineer, and

West Diner continued

they will pursue the signing of the agreements by all parties concerned.

On September 11, 1969, the Commissioners were informed that West Diner had signed the agreement, but they were still waiting for the agreement to be signed by the Township of Little Falls' Attorney, and the City Attorney for the City of Clifton.

Letters to the Commissioners, dated September 19, 1969 and November 3, 1969, reiterated they were still waiting for signatures. Mr. Lubetkin contacted the City of Clifton by telephone to expedite this, and was assured by the City that this would be done at once. A later call from Clifton indicated it had been signed by Clifton, but was being held up by Little Falls.

On December 19, 1969, a letter was received from West Diner stating that they had finally received the signed agreements. The next step was to get approval by the Department of Transportation, which, the Commissioners were told, had indicated it would approve the work, but the application had to be made by the municipalities concerned. This was the situation as of the end of 1969.

On February 27, 1970, the Commissioners filed a Complaint, and an Order to Show Cause by this company, was to be heard on March 13, 1970. This matter was postponed at the request of West Diner, since they had the plans to build the sewer from their plant to the Clifton Sewer System. All approvals had been obtained from the City of Clifton and the Township of Little Falls, and a contract to install the sewer was given to S. A. Miller Construction Company.

Construction trouble was encountered when they ran into solid rock in one area and had dirt slides in another area, causing delays. Construction was finally completed and the final connection to the Clifton sewer was made on September 29th, thus eliminating the pollution.

Dec. Violation and Elimination-Whippany Paper Board Company,
29 Clifton Mill, 1 Ackerman Avenue, Clifton, New Jersey.

1969
to

Jan. On December 29, 1969, a broken sanitary sewer line
5 underneath the sidewalk allowed industrial waste to enter into
1970 a nearby catch basin, and thence to the Passaic River. The plant
was shut down for the holiday coincidentally with the discovery
of the break and all repairs were made prior to the opening of
the plant on January 5, 1970.

Dec. Violation and Eliminations-White Metal Mfg. Company,
17 220 Wagarow Road, Hawthorne, New Jersey.

Inspector T. Costello traced an oily film in Goffle Brook to this company. Upon notifying the company, he was told that two porters, contrary to instructions, were dumping drippings from extrusion pressers into yard drains. Drippings are normally collected in drums and are carted away by a scavenger once a week.

Report No. 1

Progress on Repair of Sewer under Gouverneur Street

On Sunday, October 25, 1970, the bulkheads were lowered in the 11'3" sewer at McCarter Highway in Newark, and the pumping station to pump the sewage around the break area started operating, and construction on the repair of the cracked sewer began after months of preliminary work. The work inside the sewer was completed November 20th, and on Saturday, November 21st, at 9:00 P. M., the bulkheads were lifted and sewage again flowed through the repaired section. The actual time of working in the sewer was 28 days, which was less than the anticipated 45 days originally estimated. It is estimated that the remaining work, dismantling pumping station, removing by-pass pipes, building manholes, repaving street, etc., would be completed in January, 1971.

Originally, it was estimated that to repair this sewer, the work could be done for approximately \$500,000.00, but this would involve the discharging of large amounts of raw sewage to the Passaic River for approximately 45 days during December and January, 1969. Since it was the consensus of opinion among the municipalities that they did not desire this discharge of sewage to the river, the method of construction chosen involved the construction of a by-pass pumping station and overland pipes, so the sewage could be diverted around the problem area during reconstruction. The additional construction cost of this work was \$2,000,000.00, making the construction cost of the project \$2,500,000.00.

The Commissioners were told that this project should be eligible for State and Federal Aid, and therefore they applied for such aid to relieve the municipalities of this financial burden. The formal application was made on September 19, 1969. The plans and specifications were accepted, and the project was designated WPC-NJ-297R and 85-S. The Commissioners were told that contracts could be awarded for construction, and they could proceed with this project while eligibility was determined. If the project was declared eligible, and if funds were available, then the Commissioners would be reimbursed any money due them.

The State gave a priority number and approved this project on October 21, 1970. At a conference held with the State and members of the Federal Water Quality Administration held November 23, 1970, Mr. Lubetkin asked the status of this application. Nothing further was heard about this matter as of the end of 1970.

As of the end of December, 1970, the Commissioners had paid \$222,500.00 for engineering and supervision, \$6,500.00 for other expenses, and \$2,059,400.00 to the contractor.

Report No. 2Time Table for Upgrading Facilities

The Commissioners were under orders of the then State Department of Health (dated July 24, 1968) to upgrade their primary plant to secondary facilities by October, 1970. The Commissioners outlined a program of not only upgrading their treatment plant, but also installing additional sewers, putting in automatic river monitoring equipment, and possibly installing an additional treatment plant in Clifton, and other necessary items to make the Commissioners' system, from river policing to treatment, the most modern and efficient in the country. The estimated cost of this work is \$300 million dollars, and a time table, showing the work would be completed by the end of 1976, was submitted to the Third Session of the Hudson River Enforcement Conference, both in New York on June 19, 1969, and in Newark at the reconvened session on November 25, 1969. At those times, it was pointed out that the Commissioners had no practical means of financing such a large undertaking, but that a bill had been introduced which would give the Commissioners bonding powers. This legislation became law when it was signed by Governor Cahill in January, 1970.

Meanwhile, the Commissioners completed plans and specifications on new head-end facilities, which would include, among other things, new screens, grit chambers, oil and grease removal facilities, and an incinerator to burn grease, oil, scum and screenings. The estimated cost of this phase was approximately \$13.4 million dollars, and on July 8, 1970, the Commissioners made application for Federal and State Grants. To date, the plans and specifications have not been approved by the State (See Head End Facilities Report).

The Commissioners had a conference with the Department of Environmental Protection on June 16, 1970 to discuss and determine a realistic time table to accomplish all that the Commissioners desire to do. The State desired the work to be done sooner than the schedule submitted by the Commissioners, but the Commissioners' Consultant said it was impossible. Both parties agreed to hire an independent Consultant, chosen by the State, and paid for by the Commissioners, to make a review and report of the program and time table. The Consultant, Elson T. Killam Associates, in its report, stated, "In view of the magnitude and complexity of the preliminary engineering stage, a massive engineering effort is required to develop all of the necessary data required to establish the design criteria. We feel that the time table is tight and cannot be reduced to expedite the completion date of any phases of the work."

Time Table for Upgrading Facilities continued

In the final summary of their report is the following statement:

"In summary, we are of the opinion that the proposed time table for undertaking all aspects of the proposed improvements, namely, engineering studies and investigations, preparation of detailed plans and specifications for advertisement, financing and construction, cannot be improved. It is our opinion that the scope of the work is such that extensive and extraordinary efforts must be exerted in every aspect of the work, including engineering, design, and construction, to meet this time table."

The Commissioners again met with the Department of Environmental Protection on August 17th, and it was agreed by all that the Department would recommend the Commissioners' time table be made part of the Court Order in a Consent Agreement.

On Wednesday, September 30, 1970, the Consent Order was presented to the Court, which set the time table which the Commissioners had given to upgrade its facilities by the end of 1976. The Commissioners also agreed to chlorinate their effluent for the four month period from May 15 to September 15 of each year, starting May 15, 1972.

The Consent Order also provided that the Commissioners submit quarterly progress reports, with the first such report submitted on or before January 1, 1971. On December 30, 1970, the first progress report was submitted to the Department of Environmental Protection.

Report No. 3Progress on Head End Facilities

On July 8, 1970, the Commissioners submitted to the State of New Jersey applications for State and Federal Grants on the Head End Facilities. The estimated cost of this work was \$13,396,000.00. The Commissioners were requesting State Aid in the amount of \$3,299,000.00, and Federal Aid in an amount to be determined by the Federal Water Quality Administration up to \$7,257,000.00. On August 6th, the Commissioners received acknowledgement, and numbers WPC-NJ-318 (Federal) and 97-S (State) were assigned to the project. On August 18th, in response to Mr. Lubetkin's telephone call concerning the delay on action on this application, a letter was received by the Commissioners from the Department of Environmental Protection, stating that an eligibility conference would be held soon. On September 14th, the Commissioners were informed that the said conference would be held on October 2, 1970. At this conference, various items were discussed, including the latest Federal requirement of equitable charges to industries in proportion not only to flow, but of strength of waste. At the end of this conference, the Commissioners had satisfied the State that all State requirements had been met, and it was assumed that the application would be submitted to the Federal Authorities.

While meeting with the Federal Authorities on October 6th, the Commissioners were told that no priority number had been issued by the State, and therefore the Federal Authorities were powerless to act. At this conference, the Federal Authorities reiterated their regulation concerning equitable charges to industry. On October 9th, Mr. Lubetkin wrote to the State, requesting that the State expedite the submission of all papers to the Federal Authorities, so that they would be in a position to act upon the application.

On October 21st, the Commissioners received a letter from the Department of Environmental Protection, requesting another date for a more specific review of the Head End Facilities. This conference was held November 2, 1970, at Trenton, and was attended by the Commissioners' consultant. The conference covered the handling of additional tributary flows and general design parameters, rather than specifics of the Head End Facilities.

On November 13, the Commissioners wrote to the Federal Water Quality Administration, explaining their position on the new regulation covering industrial discharges and requested that the Federal Water Quality Administration do everything it could not to hold up work on this project.

On November 23, another conference was held among representatives of the State Department of Environmental Protection, Federal Water Quality Administration and the Commissioners. At this conference, the State representatives said they would approve the Commissioners' application and submit it, together with a priority number to the Federal Water Quality Administration, as fast as possible, but it would take about a month.

Head End Facilities Report continued

The Federal Water Quality Administration said it would take from two to three months to review the application and determine eligibility for Federal (and therefore State) grant.

At the conference of November 23rd, Mr. Lubetkin complained about the long time delay and he stated that if such a time delay for Federal and State approval is met on other applications, such as the chlorination facilities, then the desired time table would not be able to be met, through no fault of the Commissioners.

Mr. R. Ricci, Chief of Construction Grants Program, suggested that if the application for grant on the head end facilities were to include the chlorination facilities, it would save a lot of time on processing that part. Mr. Lubetkin said he did not want to do anything that might delay the head end facilities any further. Mr. Ricci stated that this procedure would not in any way hold up his office in processing the Federal Grant application. He confirmed this procedure in a letter dated December 17, 1970. This was reported to the Commissioners at their meeting of November 27th, and the Commissioners authorized their consultant to modify the present application to include the chlorination facilities, in order that there be no delay in that work.

On December 21st, Mr. Segesser, Chief Engineer of the Bureau of Water Pollution Control of the Department of Environmental Protection, wrote to Mr. Lubetkin concerning Mr. Lubetkin's statements relative to the delay. In this letter, Mr. Segesser states:

"You may be assured that we will continue to strive to make every effort to minimize the time involved in reviewing these proposals, realizing full-well that the Commissioners are committed to a court established work performance schedule. However, the Passaic Valley Sewerage Commissioners' pollution abatement construction program will be the most expensive and complex undertaking of this sort in New Jersey. In this instance, the unusual will, in fact, be common.

It is therefore extremely important for all parties involved to continue to cooperate with each other in order that work on this vital project can be started at the earliest possible time. We are committed to do our part."

As of the end of 1970, the Department of Environmental Protection had not completed its review of the Commissioners' application and it had not been given a priority number and sent to the Federal Agency. However, in order to expedite Federal handling, plans and specifications were unofficially sent to the Federal Water Quality Administration for their review in order that they could become familiar with them.

Report No. 4

Report on Pilot Plants

(1) Conventional Activated Sludge (35 gal/min.)

The purpose was to develop process design criteria for a secondary activated sludge plant. The pilot plant study is divided into two twelve week periods. The first period would prove that it is a feasible process, and basic data is gotten to obtain information for calculating tank volumes, aeration horsepower, surface area for clarification, and to determine the quantities of waste sludge that would require ultimate disposal.

The first period began October 8, 1970 and terminated December 18, 1970. The plant was operated at four different conditions, as follows:

Phase I: Effluent from basins was given further settling in a pilot scale clarifier. The resulting effluent then went to the activated sludge unit operated at normal detention time of five hours aeration.

Phase II: Effluent from basins went directly to activated sludge unit without further settling. The activated sludge unit was operated at five hours detention time, but carried a higher concentration of mixed liquor suspended solids.

Phase III: Similar to Phase II, except the detention time was three hours in the aeration tank.

Phase IV: Similar to Phase I, except the detention time was three hours in the aeration tank.

The data on the first period is being collated and evaluated.

The operation of the second twelve week period is dependent upon the findings of the data obtained from the first period. It is expected to operate the plant at proposed design conditions. Pilot plant solids handling equipment will be brought to the site to develop design criteria for sludge handling facilities.

(2) Bio-Disc Process

The Commissioners' Chief Engineer and Consultant visited the pilot plant at Jamaica Bay, New York, and were impressed with results obtained and the relative inexpensiveness of this equipment. Mr. Mangano discussed this with Dr. Heukelekian, an authority in his field of sewage biology. Dr. Heukelekian wrote to the Commissioners saying that it was his opinion that it has a high potential of successful application in the Commissioners' existing tanks.

Pilot Plant Report continued

Bio-Disc is a series of rotating light plastic disks, about 40% submerged in the sewage. A biological growth adheres to the disk and, due to the slow rotation of the disks, is alternately in contact with the sewage and with the air. The biomass feeds on the dissolved sewage and then absorbs or "breathes" the oxygen from the air. There is no question in anyone's mind that the Pas-saic Valley sewage can be treated in this manner. The only problems are the hydraulics of getting all the sewage past the disks in a deep tank, and to remove a sufficient amount of oil to keep the disks from being coated to a degree as not to allow the air or sewage to reach the biomass.

Mr. Lubetkin and Mr. Manganaro visited some small, but full sized plants in France and Germany (at no cost to the Commissioners), and felt, that in view of the tremendous potential savings in money (\$50 to \$100 million dollars), if the system is successful in the Commissioners tanks, that the Commissioners should test this at their plant. The recommendation was made to the Commissioners, and at their board meeting of December 17, 1970, the Commissioners entered into a contract with Autotrol (the owners of the U. S. patent) to construct a small testing plant utilizing Bio-Disc. Autotrol agreed to participate in the costs, and a full size adaptation of one of the Commissioners' basins will be utilized for this testing.

First, a small pilot model is to be built to check hydraulics, and if this is successful, then one of the Commissioners' basins would be modified and full size equipment is to be installed and tested (the capacity of the "test plant" will be from 3 to 4 M.G.D.). It is estimated that the plant should be in operation in about 8 to 10 months.

(3) "Unox" Process

The Commissioners' Consultant was authorized to have a pilot plant installed to test the "Unox" process on the Commissioners' waste. The "Unox" process, developed by the Linde Division of Union Carbide Corporation, uses oxygen instead of air in the activated sludge system, thus the required sizes for the same degree of treatment are smaller, thus saving construction costs.

Report No. 5Paterson Overflows

Overflows from the Paterson sewers still occur during certain peak hours. The volume is not large, and the amount of dissolved oxygen shows that the river absorbs this without deleterious effect; however, the appearance is very bad at the point of overflow. Where possible, the Commissioners have had overflow weirs raised to halt pollution, but this is limited by the problem of the combined sewers in Paterson.

The Commissioners have a study under way by their consulting engineer of the problems and volumes in this area, with a view of constructing a parallel trunk sewer to handle the increased flow. However, it is not anticipated that this sewer could be completed before the end of 1973. In the interim, the Commissioners plan on cleaning their trunk sewer in this area, and hope to get a little extra capacity (not enough to solve the problem, but to reduce the times of overflows). This will be done during 1971.

The Commissioners met with the Mayor of Paterson in order to attempt to find methods of reducing this pollution until the new sewer is built. The following procedures were agreed upon:

- (1) A meeting would be held with all large users of the system, with a view of determining if a scheduling of their discharge to the sewer to off-peak hours could control things temporarily.
- (2) All new sewer construction would be separate; no new combined sewers.
- (3) Paterson would work up a master plan, with an aim of rebuilding many of its combined sewers on a separate basis. This item would be spread over a period of time and would need considerable State and Federal Aid.

During this conference, Mayor Kramer pointed out the problem Paterson was having with bank refuse. As soon as they clean an area, he stated that large amounts of material came over the Great Falls from above Paterson and were deposited in the shallow waters and banks in Paterson. He asked if something could be done about controlling this above the Great Falls, as Paterson was getting a reputation that, in his opinion, they did not deserve. The Commissioners pointed out that the Commissioners' jurisdiction did not go above the Great Falls and suggested he contact the Department of Environmental Protection concerning this matter.

The Commissioners' engineers met with the State Department of Transportation concerning the peripheral highway to be constructed around Paterson and the possible conflict with the Commissioners' proposed new sewer.

Paterson Overflows continued

At this conference, it was pointed out that different regulations are now in effect than those at the time of the original construction of the Paterson sewers and the Passaic Valley Sewerage Commissioners' trunk sewer connections, and each sewer that was to be reconstructed by the Department of Transportation, because of the new highway, must abide by those rules. They were told that all new sewers must be separate and no longer would new combined sewers be allowed to overflow into the Passaic River without some form of treatment. The Department agreed to cooperate with the Commissioners and the City of Paterson in the design of any reconstructed sewers, and in the redesign of any necessary regulator chambers.

The Commissioners have authorized their consultant to prepare a report with sufficient information to apply for a demonstration grant from the Federal Government on treating the storm overflows from the Paterson and Newark areas.

Report No. 6

Thermal Pollution

In reply to the Commissioners' request, on October 5th, the Department of Environmental Protection stated that hearings on standards for thermal pollution would be held soon. They stated that contemplated thermal surface water requirements for TW-3 waters (Passaic River below the Dundee Dam) are as follows:

"No heat may be added, except in designated mixing zones, which will cause temperatures to exceed 85°F or which will cause the temperature at any given site to exceed the monthly mean of the maximum daily temperature prior to the addition of heat by more than 4° F during September through May, or more than 1.5°F during June to August. The rate of temperature change in designated thermal mixing zones shall not cause mortality of the biota."

As soon as the above or any modification of the above is formally adopted by the State as a standard, then the Commissioners will move to halt any thermal pollution in the Commissioners' district.

Report No. 7Comments on the Passaic River During 1970

The flow in the Passaic River averaged about 870 cubic feet per second, as reported by the U. S. Geological Survey at Little Falls, New Jersey. This is higher than the approximate 840 c.f.s. reported in 1969. However, average figures can be misleading, as during 1970 we had wetter months and dryer months than 1969, as shown in the following monthly average recordings:

<u>Month</u>	<u>1969 Flow (C.F.S.)</u>	<u>1970 Flow (C.F.S.)</u>
January	375	462
February	422	2,951
March	1,531	950
April	1,503	2,702
May	577	559
June	472	307
July	573	155
August	1,642	208
September	522	106
October	271	281
November	756	1,188
December	1,401	595

As can be noted from the above, the river was flooded in February and April of 1970, while from June through October (the critical warmer months), the river had a very low flow, and at times in July, August and September, seemed almost stationary. To aggravate matters, the dredging of the Passaic River and Weasel Brook in the area of Passaic and Wallington during these hot, dry months, disturbed the bottom of the river, making it more turbid downstream and contributing enough B.O.D. so as to critically effect the dissolved oxygen in the river at this location and a short distance downstream. This dredging is being done by a contractor for the New Jersey State Department of Transportation in a project to relocate a portion of the Passaic River to accommodate the extension of Route 21 Freeway. Mr. Lubetkin has informed Mr. Able and Mr. William McCann, representing the contractor for the State, that they should proceed as rapidly as possible in their dredging operation, since this operation is really a "pollution" of the Passaic River during warm weather, when biological action in the river is accelerated. Mr. Lubetkin said he would like the dredging to be completed prior to May 15, 1971.

The pollution in the City of Newark still effects the lower section of the river, and the Commissioners continually prod the City to move as fast as possible towards the removal of these illegal discharges (see Newark pollutions, Part I and Part II).

Comments on the Passaic River continued

Other problems in the Commissioners' section of the river include pollutions outside the Commissioners' jurisdiction, which effect the water policed by the Commissioners. Among others, there is the case of Vulcan Materials Company, Newark, New Jersey. This violation is not in the area under the jurisdiction of the Commissioners, but this large unsightly volume of liquid (approximately 4 M.G.D. according to the Department of Environmental Protection), discharges into Newark Bay and flows past the Commissioners' dock giving the appearance of a discharge from the Commissioners' facilities. The Department of Environmental Protection reported to the Commissioners that this company is under orders by them to treat their waste to proper standards before discharge. However, as of the end of 1970, this intermittent discharge continues apparently undiminished.

Pollutions above the Great Falls (about which there has been so much publicity), together with debris, flow into the Commissioners' district, contributing to the problem. Despite these, the river (in the Commissioners' jurisdiction) is in generally good condition as far as water quality for its classification is concerned. However, its appearance is bad. By this I mean large areas of rubblestrewn banks, considerable driftwood and debris in the water, together with unsightly old barges left to rot, become "eye pollution". It's as if some people don't seem to care. The Commissioners are powerless to act. The banks are generally within the jurisdiction of the municipalities. Several years ago, a group of public health officials from the municipalities formed a Passaic River Bank Clean-up Program that appeared to be effective, but unfortunately was not long lasting.

When a barge opposite the Commissioners' property was loose, it was the Army Corps of Engineers who tied and retied it to the Commissioners' property. When the Commissioners protested, they were told that the Corps did not want the barge to become a menace to navigation and the disposition of the barge was matter between the owner of the barge and the Commissioners.

The Commissioners went to court against Mr. A. Komar who allegedly owned the barge. In court, Mr. Komar admitted he once owned the barge, but he had sold it. When questioned by the court, he stated he didn't remember to whom he had sold this barge.

This length of river is not like other in the nation. There are no factories or municipalities "spewing" forth industrial and sanitary wastes contaminating the stream. There is no need for them to do this. The Commissioners have provided a trunk sewer for their waste discharge, and it is as easy for a connection to be made into this sewer as it is to violate a law. The more than 400 outlets which may discharge into the river, are continually monitored by the Commissioners to determine and halt any polluting discharges into the river. The pollutions which occur, as can

Comments on the Passaic River continued

be noted by reading Parts I and II of this report, are generally accidents or breaks (with the exception of Newark's storm sewers), and, although with approximately 1,700 industries in the district, there always seems to be about a dozen accidents happening, the accumulated volume is not large, and continual policing by the Commissioners keeps these under control, and the overall effect on the river is small. The Commissioners' program to improve conditions includes, among other things, an additional trunk sewer (see Paterson Overflows, Part III), and automatic monitoring stations that will check the stream 24 hours a day, 7 days a week, with information telemetered to a central control point, so that pollutions, when they occur, can be instantly detected and remedial steps immediately implemented.

It is to be pointed out that the discharge of the Passaic Valley Sewerage Commissioners' treated effluent into New York Harbor does not effect the Passaic River to any measurable degree, and therefore, the fact that the Commissioners give only a primary treatment at this time is not a deterrent to the keeping of the Passaic River clean.

There are many areas along the river that have beautiful parks and show how nice a river can be made to look. The Commissioners are dedicated to controlling the water quality, and that they do, and if only others would control appearance, we would have a river of which we could be proud.

Report Number 8

General

During the year 1970, the Passaic Valley Sewerage Commissioners pumped and gave primary treatment to 89,713.33 million gallons of sewage or 245.79 million gallons per day, at a cost of \$54.39 per million gallons.

At the Newark Bay Pumping Station and Treatment Plant under the direction of Superintendent of Plants, T. Perry, Plant Engineer, A. Rasche, Assistant Plant Engineer, P. Walker, and Superintendent of Construction and Maintenance, C. Daly, 9,358,200 kw-hrs of electric power were used at a cost of approximately 1.25¢ per kw.-hr. In addition, 715,156 gallons of #2 diesel fuel oil were used at an average cost of 11.06¢ per gallon. (Note: there will be a substantial increase in cost of both electric power and fuel oil in 1971 due to increased rates).

It is estimated that 45,190 million gallons were pumped with electric power and 44,560 million gallons were pumped with diesel power.

Peak instantaneous flow rate was 511 M.G.D. at 12 noon on 4/2/70.
Peak hourly flow rate was 505 M.G.D. from noon to 1:00 P.M. 4/2/70.
Peak daily flow rate was 410.05 M.G.D. from 9 A.M. 4/2/70 to 9 A.M. 4/3/70.
Peak weekly flow rate was 311.42 M.G.D. from 9 A.M. 3/30/70 to 9 A.M. on 4/6/70

The Commissioners barged 629,858.92 wet tons of sludge to sea (at an approximate average solids content of 8% to 10%) during the year under the direction of Superintendent of Docks and Basins, M. Andolino, Jr.

2,910.75 cubic yards of screenings and 15,860 cubic yards of grit were removed at the Newark Bay Plant, and an additional 1,636 cubic yards of screenings and grit were removed from line screens and chambers during the year.

During the year, particularly after major storms, the Commissioners experienced a great deal of difficulty with sedimentation basin equipment breakdowns, due to overload because of inadequate grit and screen facilities. However, after each breakdown, personnel worked hard to restore operation as fast as possible. It is hoped that construction on new grit and screen facilities (see Head End Facilities Report) will start early in 1971, so as to substantially reduce or eliminate this type of breakdown. Some new basin dewatering facilities were added during 1970, and additional dewatering facilities will be added during 1971 to aid in repair work on these basins.

General Report continued

This year was the first complete year of operation of the new sludge thickeners and storage facilities, which enabled the Commissioners to concentrate and store and remove more solids from the sewage. In general, the facilities operated well, with the exception of the drive shafts from the motors to the thickener heads. The manufacturer is completely cooperative and is changing the design of these shafts and couplings to eliminate this problem.

At the Commissioners' Wallington Station, under the direction of J. Manney, 3,780.63 million gallons were pumped on an average of 10.36 M.G.D. with a consumption of 508,800 kw-hrs. of electricity at a cost of 1.80¢ per kw-hr. This station pumps sewage from Wallington, E. Rutherford & parts of Garfield, Saddle Brook, Passaic and Rutherford.

A new diesel operated generator set (300 KW) was installed at the Wallington Station during 1970 to replace the old gasoline driven engines which were used as emergency drives on the pumps.

During 1970, the New Jersey State Department of Transportation was in the process of relocating the Passaic River around the pumping station, (see Passaic River Report) for the purpose of extending Route 21 Freeway. This necessitates relocating sewer lines and building a new river siphon, and in general the whole area is presently a "mess" around the Wallington Station, due to the reconstruction.

The Yantacaw Station, under the direction of P. Melillo, pumped 1,116.36 M.G. or an average flow of 3.06 M.G.D., with a consumption of 208,950 kw-hr. of electricity at a cost of 2.23¢ per kw-hr. The Yantacaw Pumping Station pumps sewage from Lyndhurst and part of Rutherford.

The Commissioners' Department of Sanitation Control, under the direction of Director of Sanitation Control, A. Goldberg, Superintendent of River Inspection L. Cuccinello, and Chemist, E. Rys, took and analyzed approximately 5,700 samples from the Passaic River and its tributaries and from various discharges into the Passaic River and its tributaries within the Commissioners' district. Approximately 32,000 separate tests were made on these various samples during the year. In addition to standard tests such as C.O.D., B.O.D., pH, total solids (mineral and volatile), suspended solids (mineral and volatile), chlorides, nitrogen (ammonia, organic, total, etc.), B. Coliform, chlorine residual, dissolved oxygen, odor. Other tests such as chlorine demand, chromate chromium, soluble ether extracts (oil), E. Coliform, total bacteria count, iron, acidity or alkalinity, cyanide, volatility and flammability, distillation fragments, nickel, zinc, manganese, copper, identification of fats and oils, and microscopic, physical examinations were made where special situations called for them.

General Report continued

110 pollution violations from 82 separate violators were eliminated during 1970 due to the work of this department. In addition, the members of the Sanitation Control Department are constantly surveying industries in the area and keeping tract of outlets into the Passaic River and its tributaries, in order to keep its records up to date.

The Meter Department, working under instruction from Engineer's Assistant, R. Ready, takes readings from approx. 70 different flow and water level meters, some daily, most weekly. The meters are constantly maintained, and slowly are being modernized with a view of computerizing the flow meters, correlating them to water level meters with an alarm system when the two types do not check, showing a mal-function or a problem in the trunk line.

The Line Maintenance Crew, under the direction of General Superintendent, M. Andolino, Sr., and Assistant Superintendent of Line, J. Kearney, keeps constant check of the line, cleaning screens, grit chambers, weir chambers, repairing manholes, and cleaning sewers.

I am ably aided in the thousand and one engineering details in the plant, on the line, and in the office, by Deputy Engineer E. Moller, and Assistant Engineer, J. Lawrence.

At this time I wish to express my appreciation to Chairman Thomas Lazzio, Vice-Chairman Walter Davis, Commissioner Carmine Perrapato, Commissioner Ben Gordon, and Commissioner Louis Bay, 2nd, for their understanding of the tremendous operating problems and their wise guidance, and particularly for the progressive policies they have established, which will enable Passaic Valley to soon lead the field again in Pollution Control.

I also wish to acknowledge the service given to the public by former Commissioners James J. McMahon, Dominic Cuccinello, and Samuel Biber, who served during the first four months of 1970.

Respectfully submitted,



S. A. Lubetkin
Chief Engineer
Passaic Valley Sewerage Commissioners